

# TOM-757AMB-1N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMB-1N	InGaN	Hi-blue	Gray	White

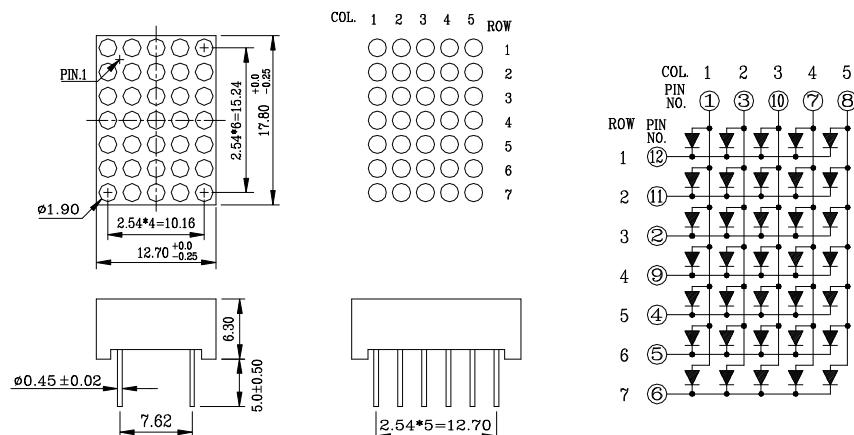
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	105	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>	10384	32907		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		465		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		26		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>		3.5	4.0	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMB-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMB-B	InGaN	Hi-blue	Black	White

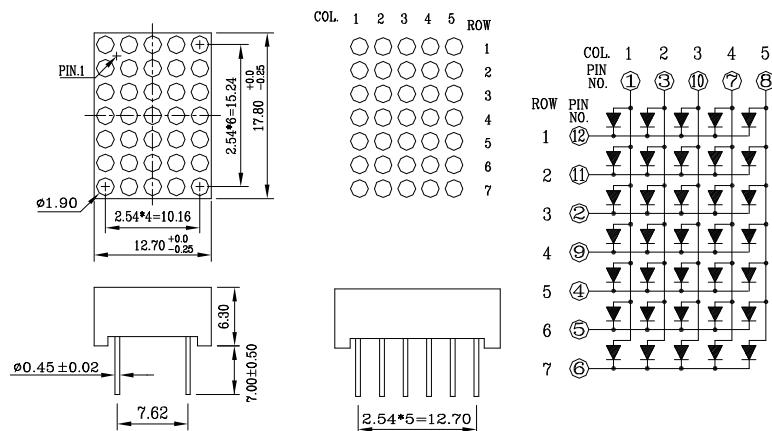
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	105	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		32907		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		465		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		26		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>		3.5	4.0	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AME-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AME-B	AlGaNp	Ultra-Orange	Black	White

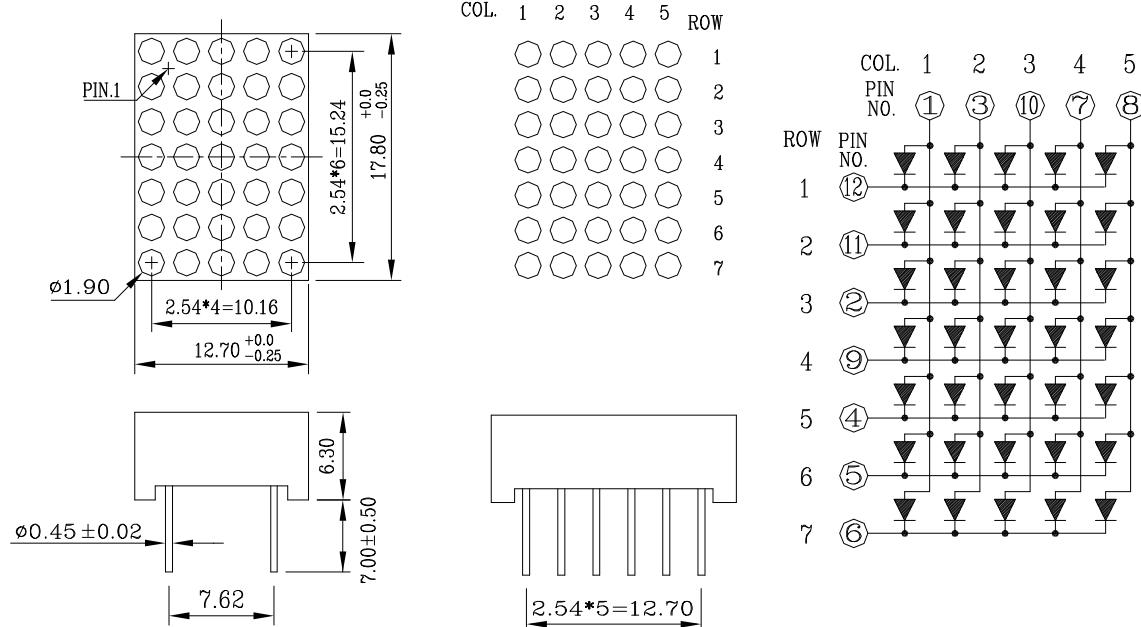
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) Per Dice	80	mA
Power Dissipation Per Dice	75	mW
Continuous Forward Current Per Dice	20	mA
Recommend Operating Current Per Dice	12	mA
Reverse Voltage Per Dice	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity Per Segment	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		623		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		17		nm	I <sub>F</sub> =20mA	
Forward Voltage Per Dice	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current Per Dice	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

The DISPLAYS should be kept at 30°C or less and 60%RH or less. The DISPLAYS should be used within one year.

# TOM-757AMG-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMG-B	AlGaInP	Ultra-Green	Black	White

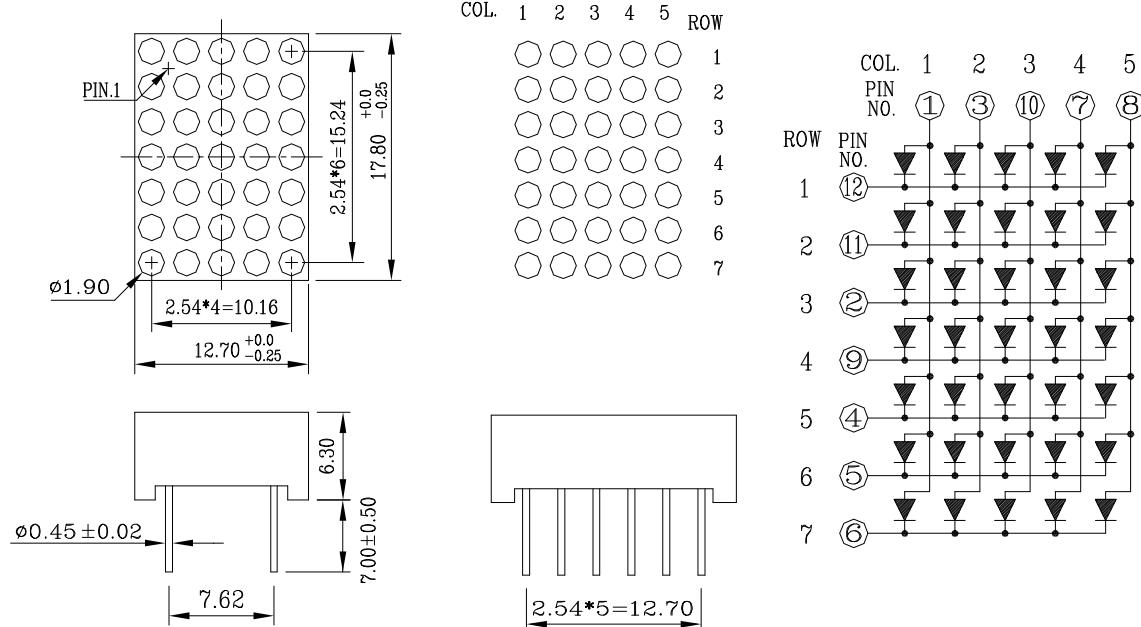
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) Per Dice	80	mA
Power Dissipation Per Dice	75	mW
Continuous Forward Current Per Dice	20	mA
Recommend Operating Current Per Dice	12	mA
Reverse Voltage Per Dice	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity Per Segment	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage Per Dice	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current Per Dice	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

The DISPLAYS should be kept at 30°C or less and 60%RH or less. The DISPLAYS should be used within one year.

# TOM-757AMG-N4

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMG-N4	AlGaInP	Ultra-green	Gray	White

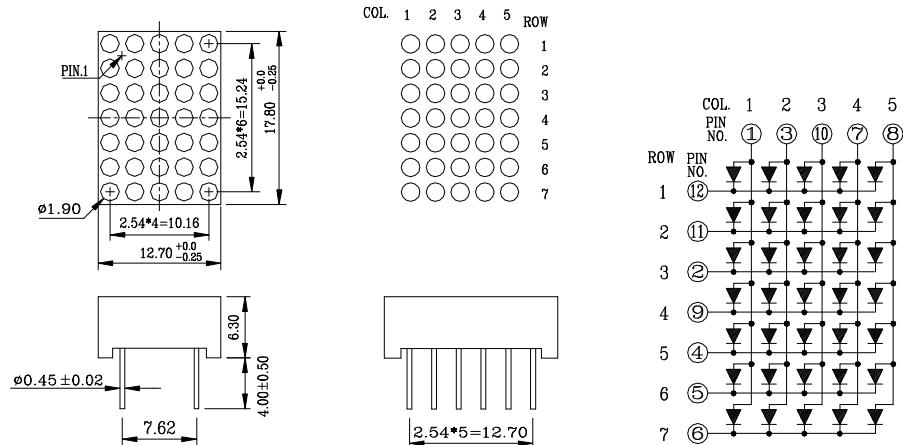
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMR-1N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMR-1N	AlGaInP	Ultra red	Gray	White

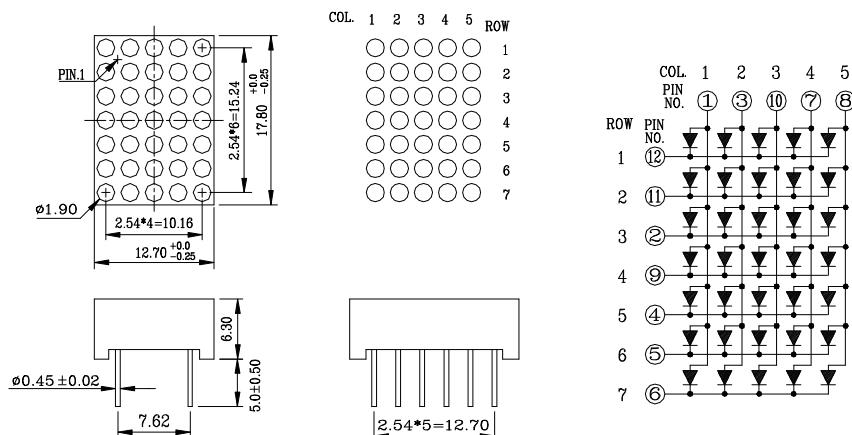
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMR-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMR-B	AlGaInP	Ultra-red	Black	White

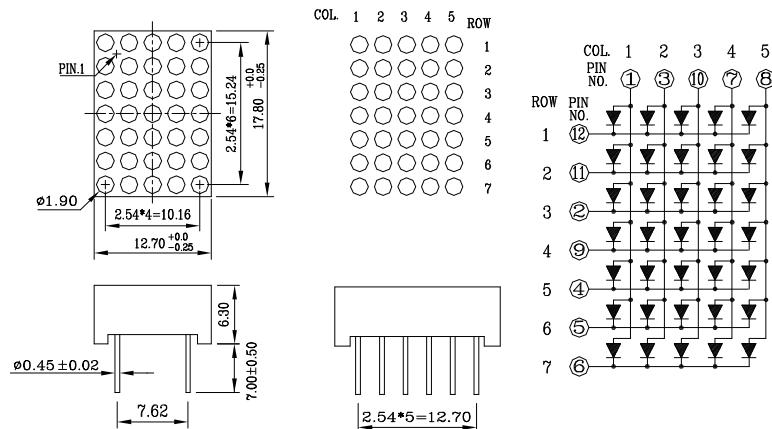
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMRL-1N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMRL-1N	AlGaInP	Ultra red	Gray	White

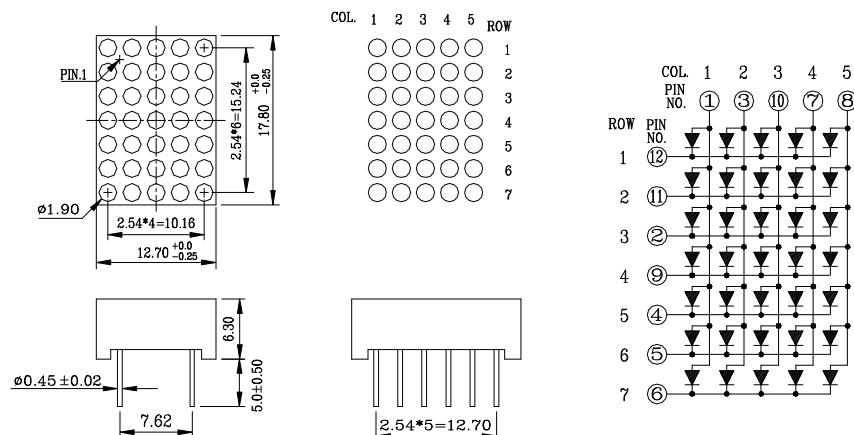
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMRL-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMRL-B	AlGaInP	Ultra-red	Black	White

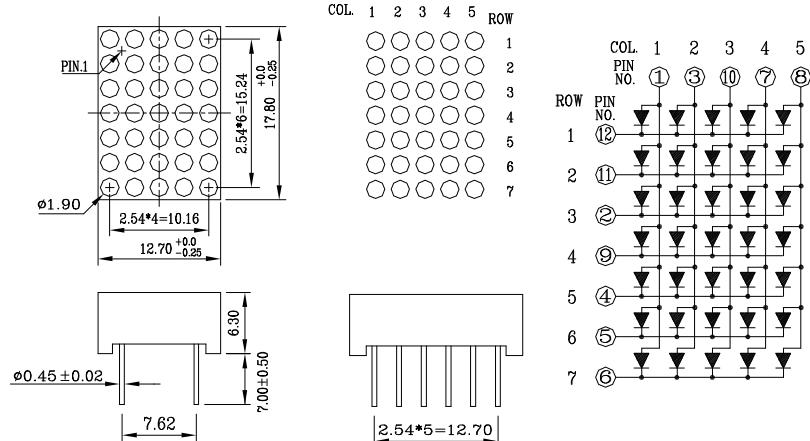
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMRL-N4

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMRL-N4	AlGaInP	Ultra-red	Gray	White

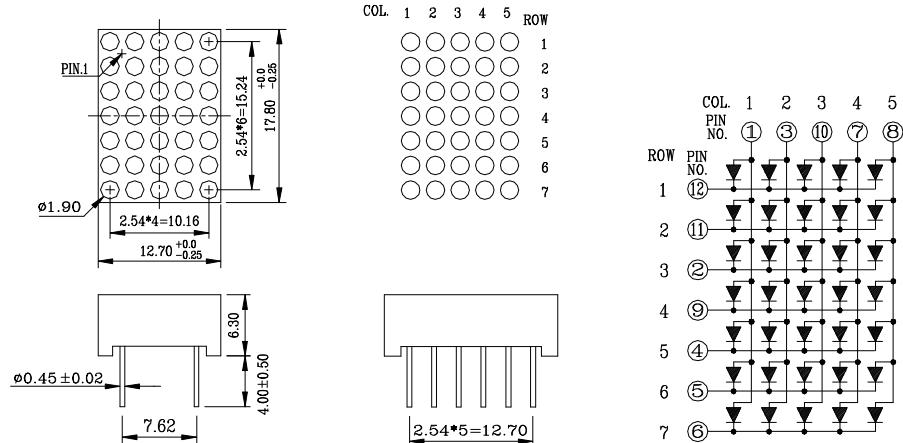
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$  ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AMRMG-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMRMG-B	AlGaInP	Ultra-red	Black	White
		Ultra-green		

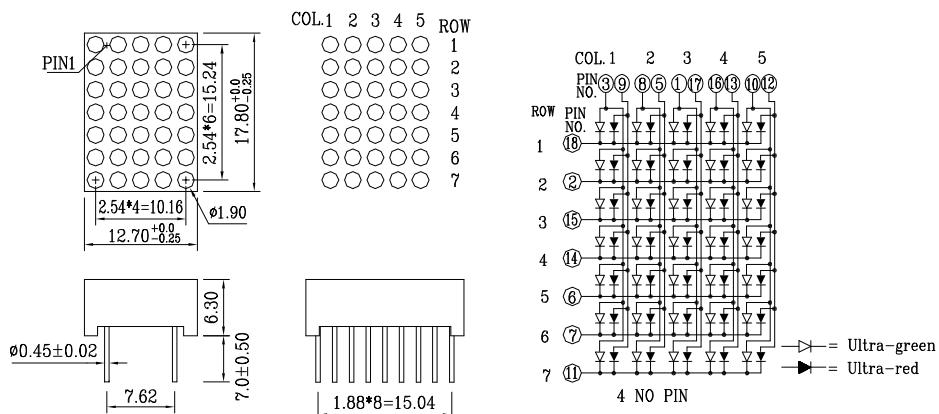
### Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Multi-color display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dice	75	mW
Continuous Forward Current Per Dice	20	mA
Recommend Operating Current Per Dice	12	mA
Reverse Voltage Per Dice	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Dominant Wavelength	$\lambda_d$	MR		630	nm	$I_F=20mA$	
Dominant Wavelength	$\lambda_d$	MG		572	nm	$I_F=20mA$	
Spectral Line Half-Width	$\Delta\lambda$	MR		15	nm	$I_F=20mA$	
Spectral Line Half-Width	$\Delta\lambda$	MG		15	nm	$I_F=20mA$	
Forward Voltage	$V_F$	1.8	2.0	2.3	V	$I_F=20mA$	
Reverse Current	$I_R$			100	$\mu A$	$V_R=5V$	
Luminous Intensity Matching Rate	lv-m			2.0:1		$I_F=20mA$	

# TOM-757AMY-N4

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AMY-N4	AlGaInP	Ultra-yellow	Gray	White

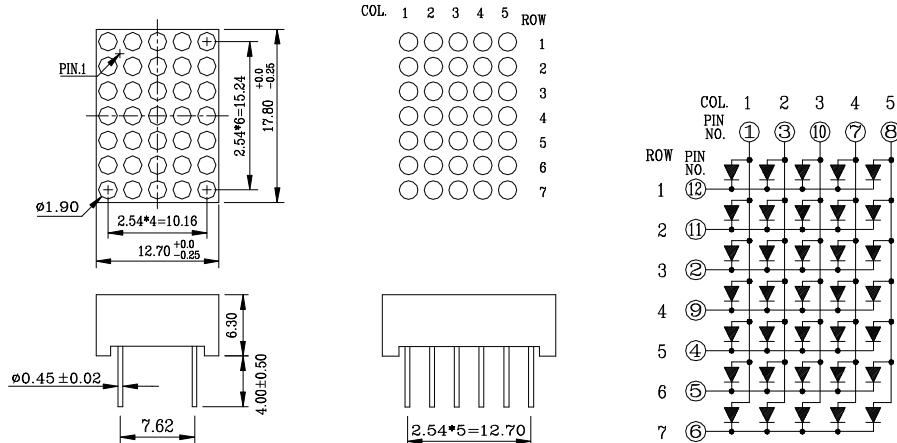
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		590		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757AS-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757AS-B	GaAlAs	Super-red	Black	White

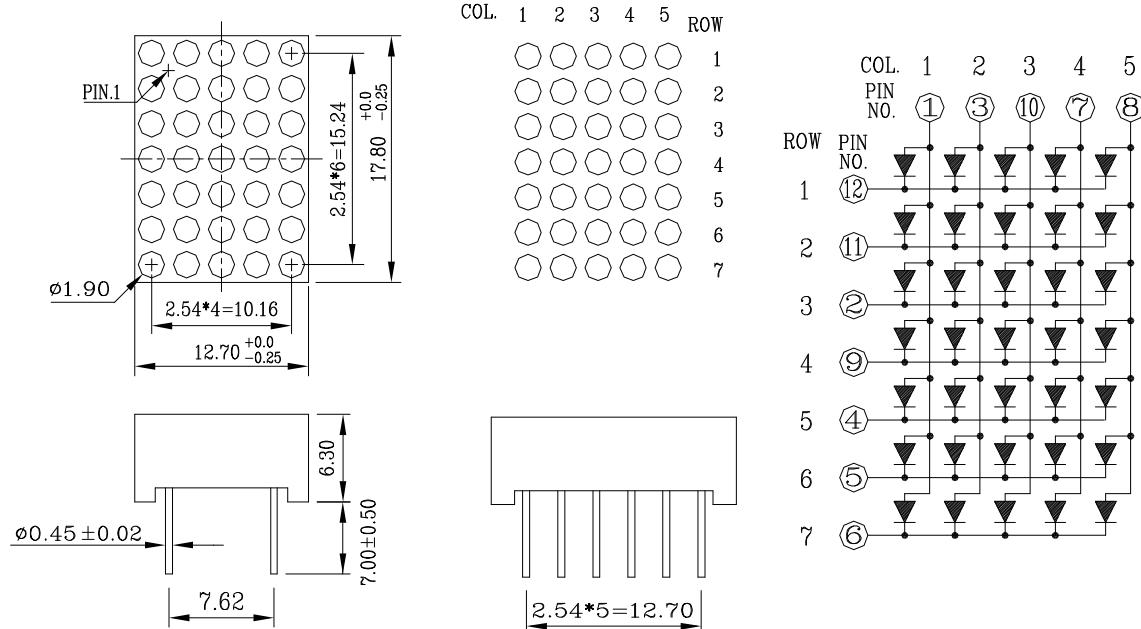
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) Per Dice	80	mA
Power Dissipation Per Dice	75	mW
Continuous Forward Current Per Dice	20	mA
Recommend Operating Current Per Dice	12	mA
Reverse Voltage Per Dice	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity Per Segment	I <sub>v</sub>		11941		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		660		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		20		nm	I <sub>F</sub> =20mA	
Forward Voltage Per Dice	V <sub>F</sub>	1.7	1.8	2.0	V	I <sub>F</sub> =20mA	
Reverse Current Per Dice	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			1.5:1		I <sub>F</sub> =20mA	

The DISPLAYS should be kept at 30°C or less and 60%RH or less. The DISPLAYS should be used within one year.

# TOM-757BMB-1N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMB-1N	InGaN	Hi-blue	Gray	White

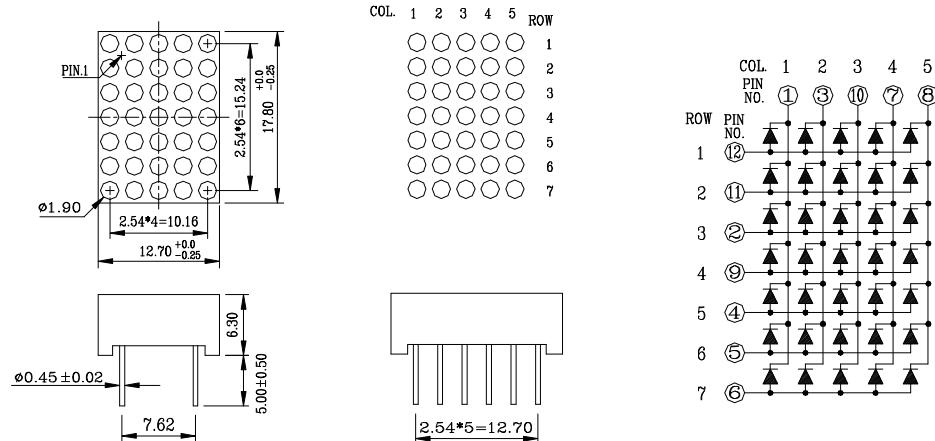
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	105	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		32907		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		465		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		26		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>		3.2	3.5	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757BMG-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMG-B	AlGaInP	Ultra-green	Black	White

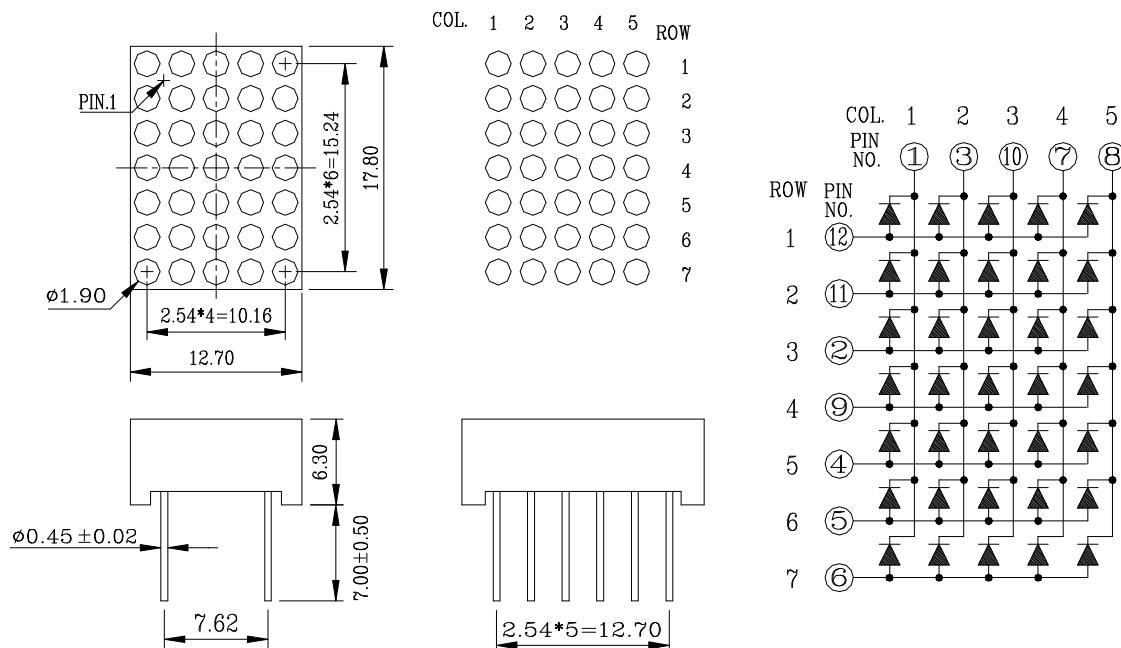
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757BMG-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMG-N	AlGaInP	Ultra green	Gray	White

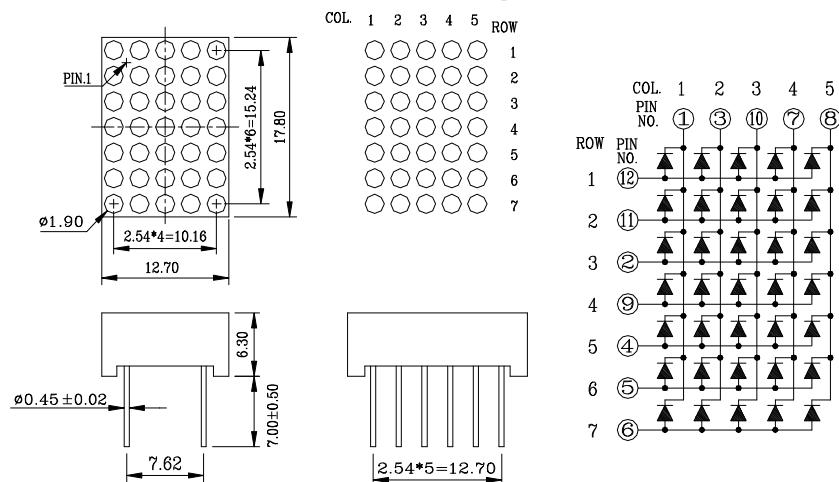
### Features

- (7x5) Ø 1.90mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757BMR-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMR-B	AlGaInP	Ultra red	Black	White

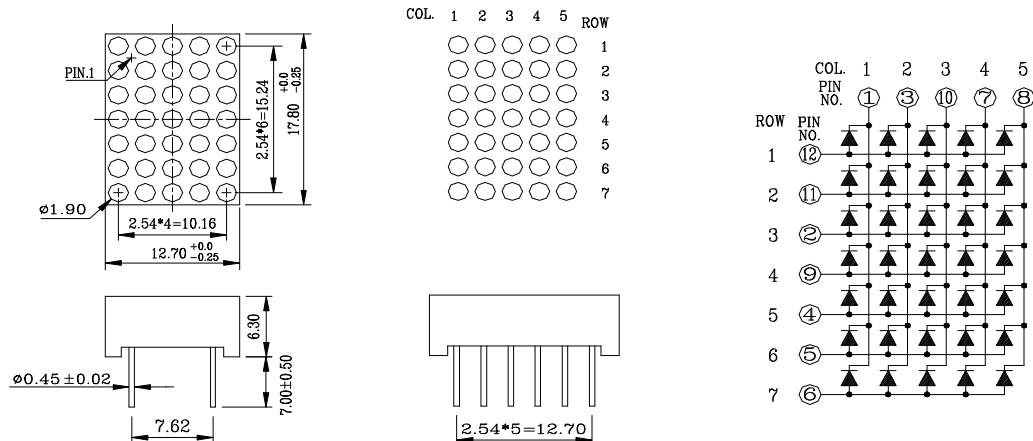
### Features

- (7x5) Ø 1.90mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757BMRL-1N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMRL-1N	AlGaInP	Ultra-red	Gray	White

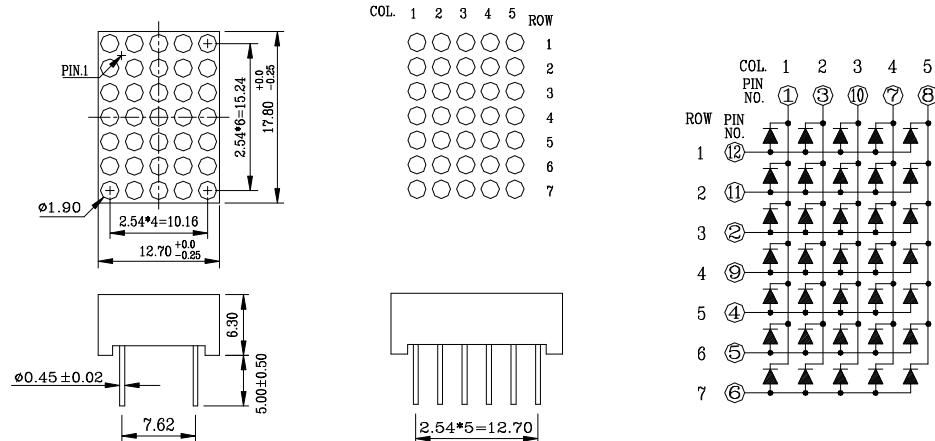
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757BMRL-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMRL-B	AlGaNp	Ultra-red	Black	White

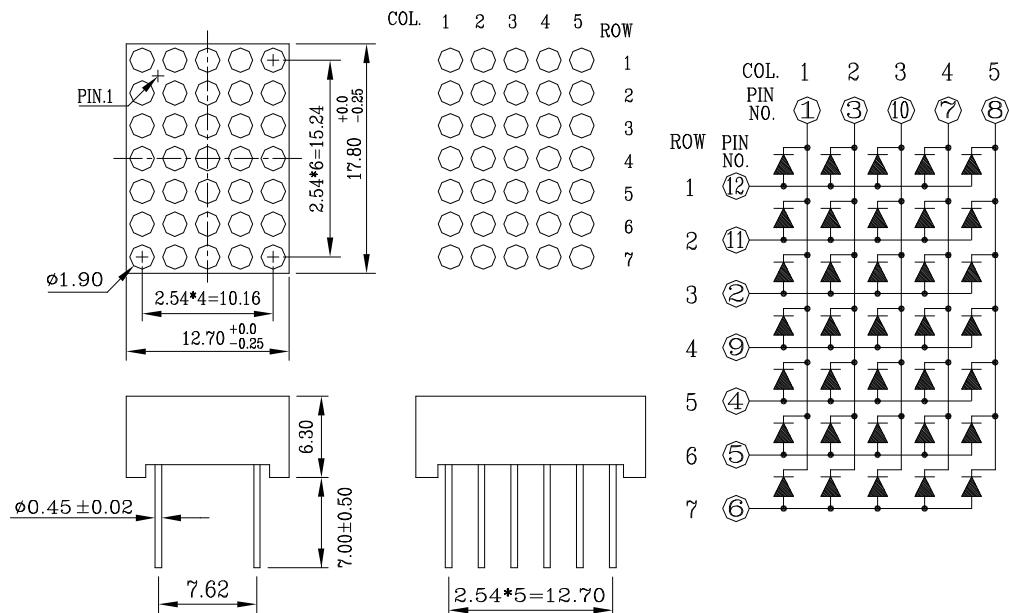
## Features

- (7x5)  $\varnothing 1.9\text{mm}$  dot matrix
- Common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Digital read out display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v</sub> -m			2.0:1		I <sub>F</sub> =20mA	

Displays need to be stored in an environment below 30 degree and below 60% humidity.

The lifetime of the displays is 1 year

# TOM-757BMRL-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMRL-N	AlGaInP	Ultra red	Gray	White

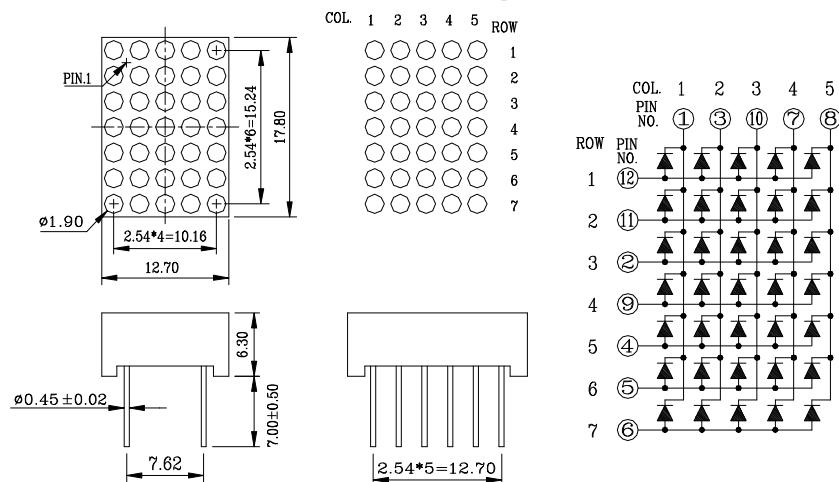
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757BMY-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757BMY-B	AlGaNp	Ultra-yellow	Black	White

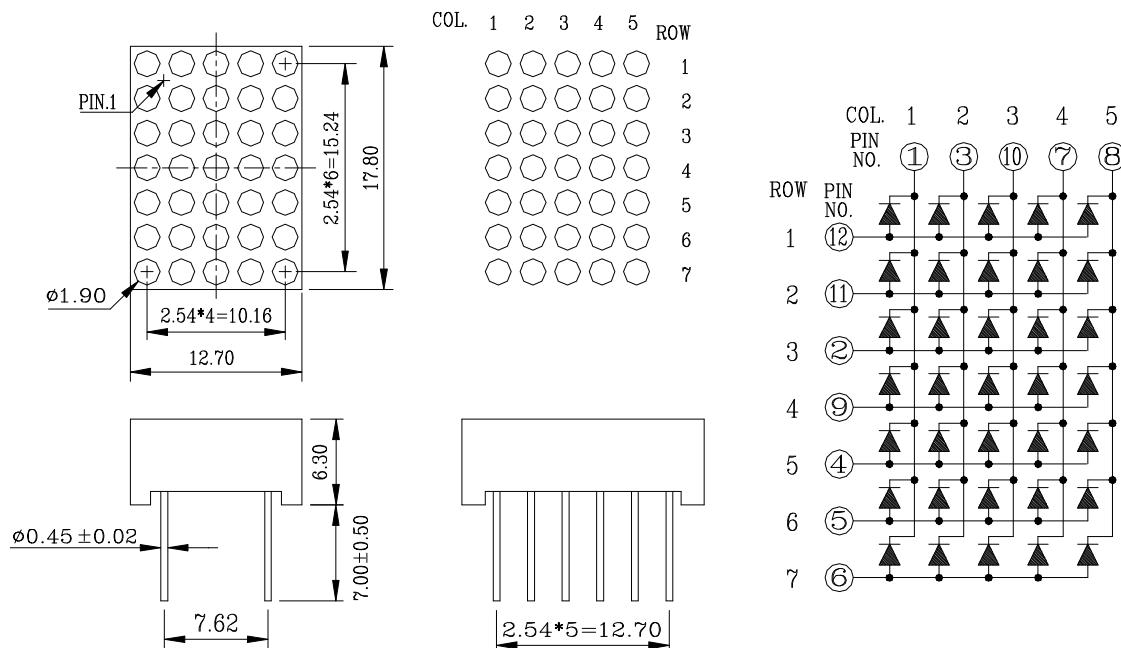
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		590		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-757HMRL-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-757HMRL-B	AlGaInP	Ultra-red	Black	White

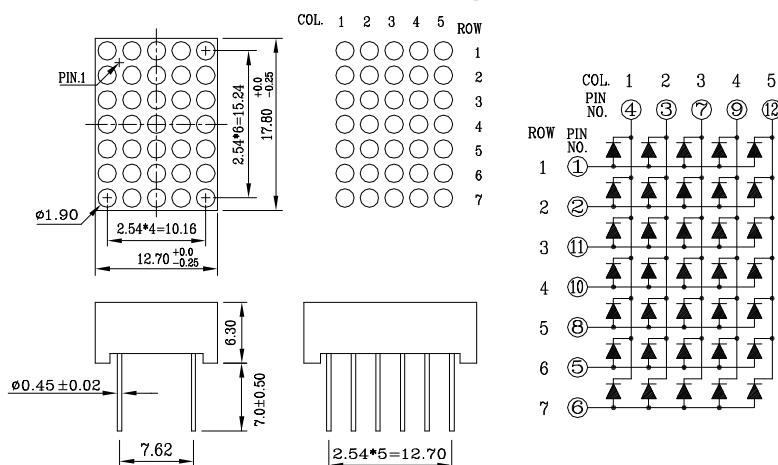
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			50	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-D757AMRL-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-D757AMRL-B	AlGaInP	Ultra-red	Black	

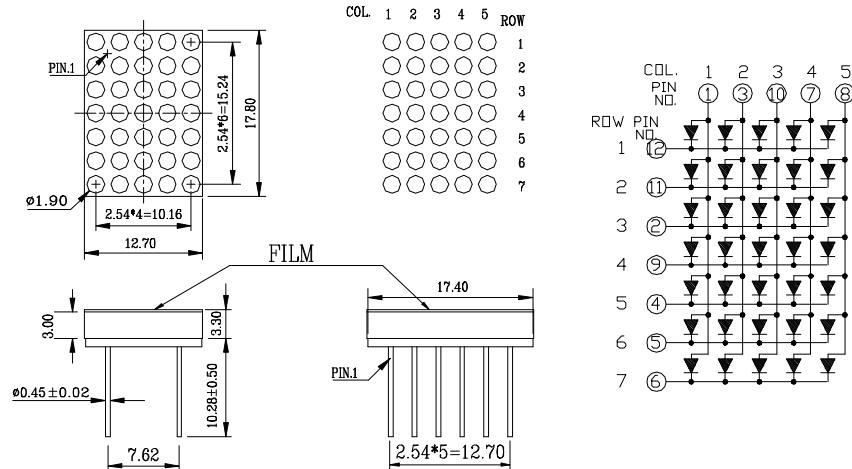
## Features

- (7x5) Ø 1.90mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1057AMR-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1057AMR-B	AlGaInP	Ultra-red	Black	White

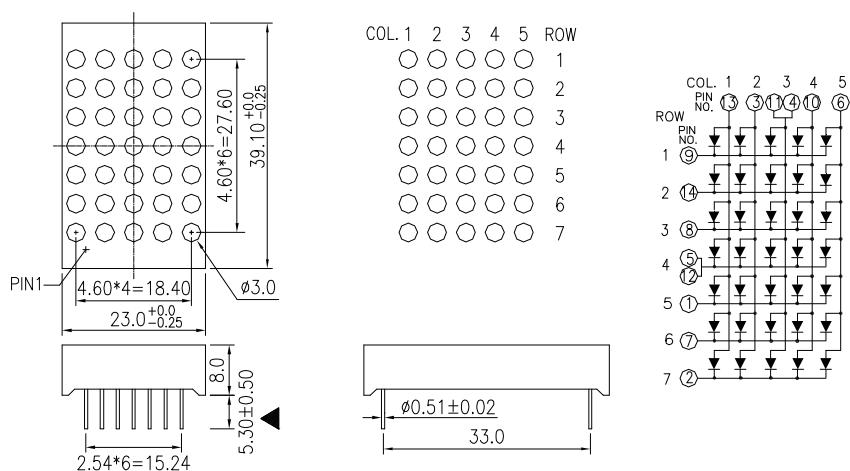
### Features

- (7x5) Ø 3.0mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1057AMR-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1057AMR-N	AlGaInP	Ultra red	Gray	White

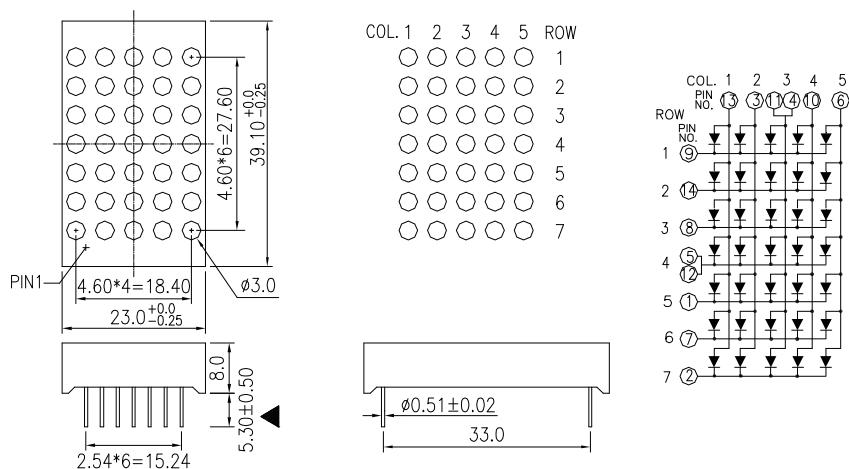
## Features

- (7x5) Ø 3.0mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: ±0.25 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1057BMG-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1057BMG-N	AlGaInP	Ultra green	Gray	White

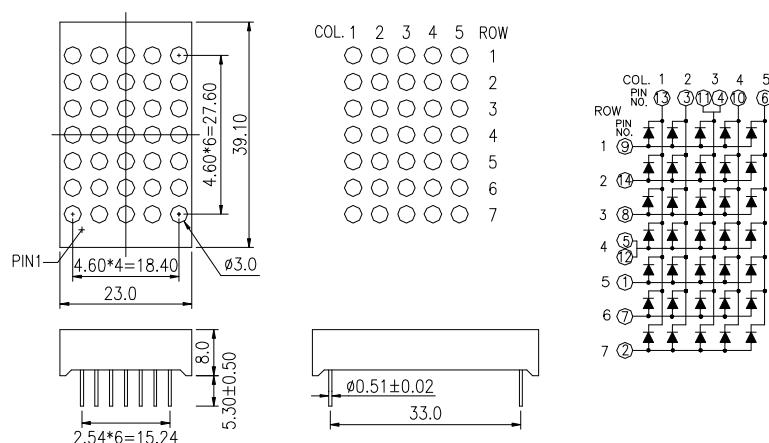
### Features

- (7x5) Ø 3.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$  ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1057BMRL-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1057BMRL-B	AlGaInP	Ultra-red	Black	White



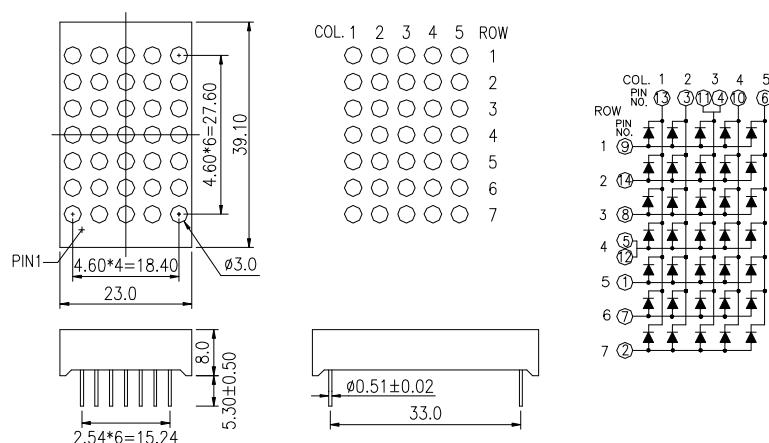
## Features

- (7x5) Ø 3.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1057BMRL-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1057BMRL-N	AlGaInP	Ultra red	Gray	White

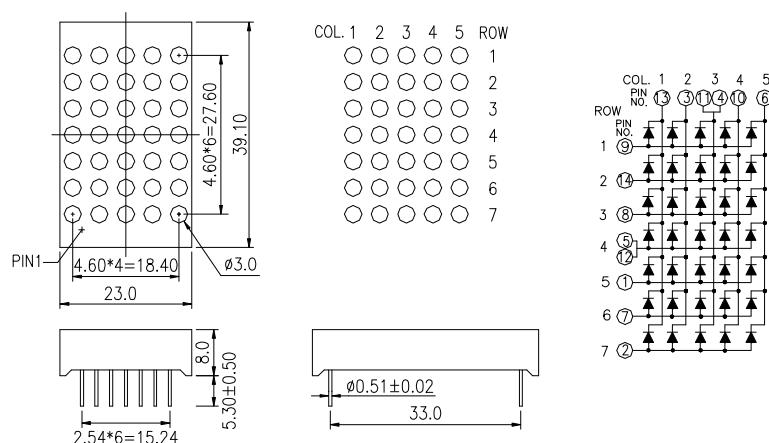
### Features

- (7x5) Ø 3.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1157AMG-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1157AMG-B	AlGaInP	Ultra Green	Black	White

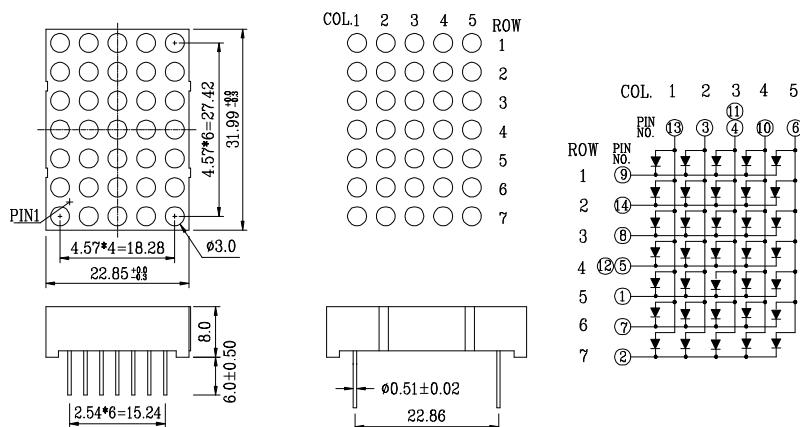
## Features

- (7x5) Ø 3.0mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) Per Dice	80	mA
Power Dissipation Per Dot Per Dice	75	mW
Continuous Forward Current Per Dice	20	mA
Recommend Operating Current Per Dice	12	mA
Reverse Voltage Per Dice	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity Per Dot.	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage Per Dice	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current Per Dice	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v</sub> -m			2.0:1		I <sub>F</sub> =20mA	

The DISPLAYS should be kept at 30°C or less and 60%RH or less. The DISPLAYS should be used within one year.

# TOM-1157AMR-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1157AMR-B	AlGaInP	Ultra red	Black	White

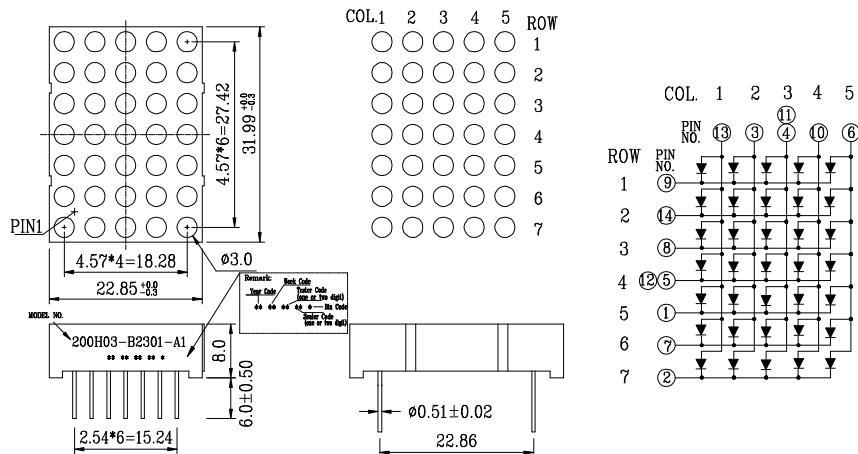
## Features

- (7x5) Ø 3.0mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1157BMB-1B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1157BMB-1B	InGaN	Hi-blue	Black	White

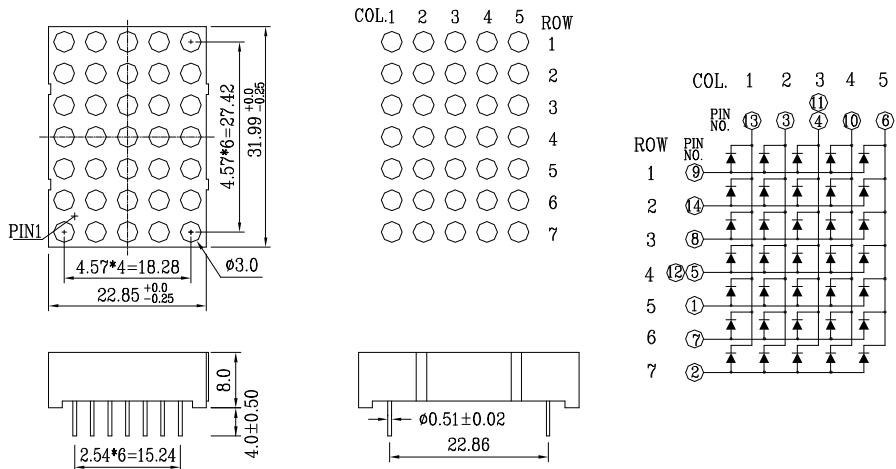
### Features

- (7x5) Ø 3.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance: +0.1 -0.3 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	105	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		32907		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		465		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		26		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>		3.2	3.5	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1157BMRL-1B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1157BMRL-1B	AlGaInP	Ultra-red	Black	White

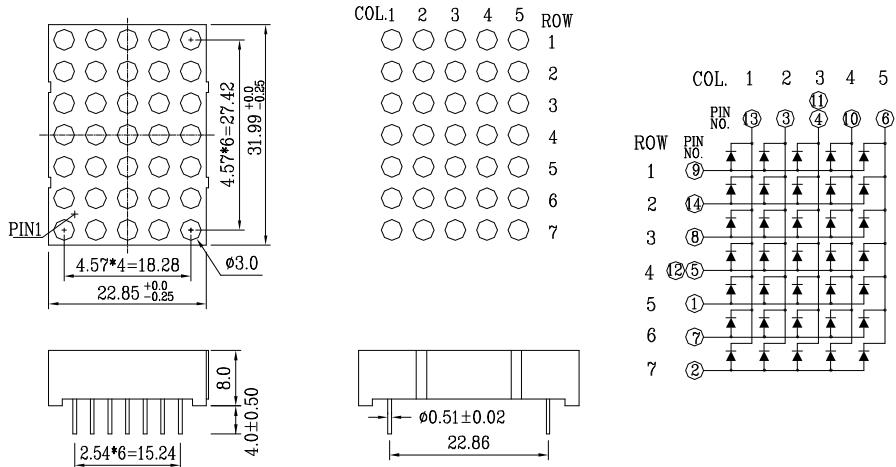
## Features

- (7x5) Ø 3.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance: +0.1 -0.3 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-1157BMRL-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-1157BMRL-B	AlGaInP	Ultra-red	Black	White

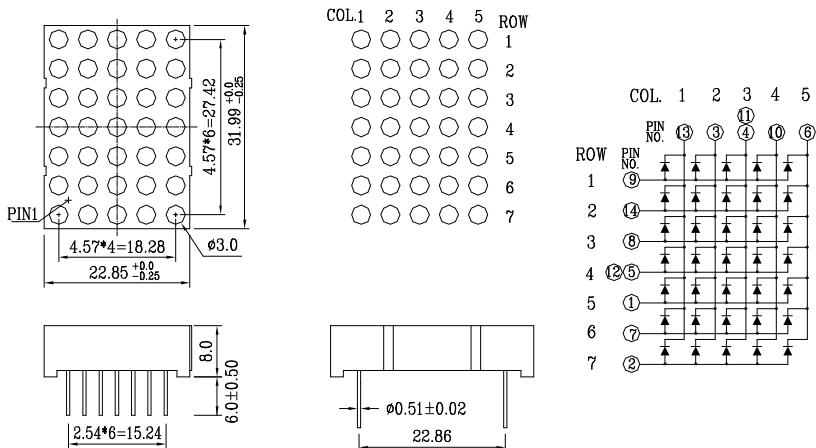
### Features

- (7x5) Ø 3.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance: +0.1 -0.3 ; Angle: ±0.1° unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		640		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-2057AMG-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-2057AMG-N	AlGaInP	Ultra green	Gray	White

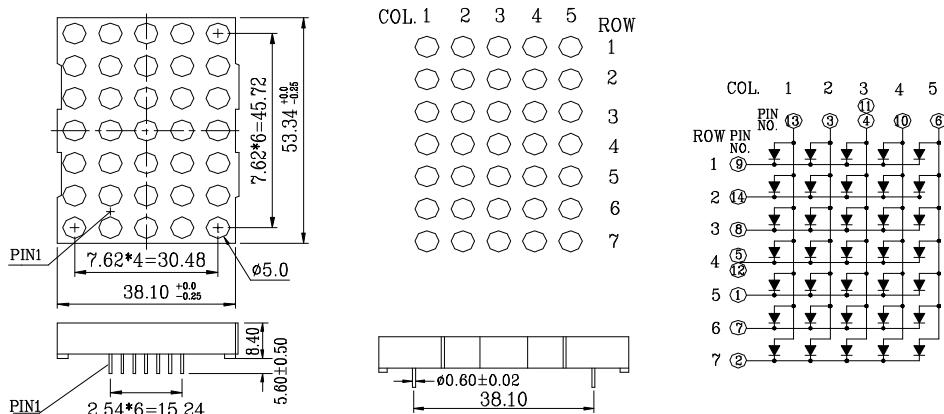
## Features

- (5x7) Ø 5.0mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-2057BMG-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-2057BMG-B	AlGaInP	Ultra-green	Black	White

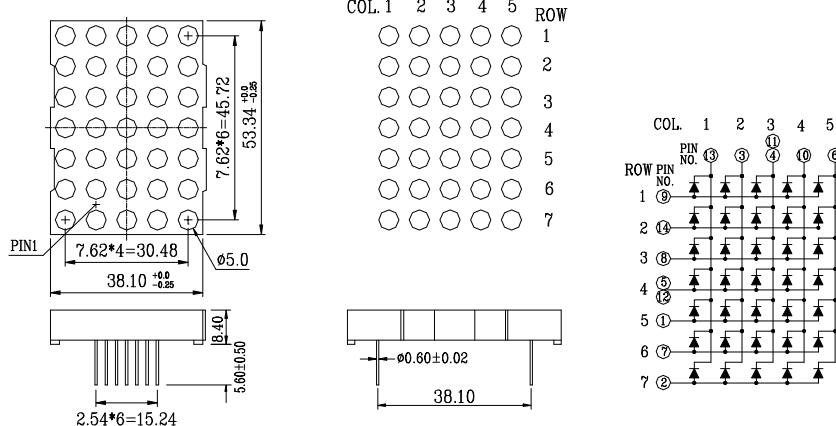
### Features

- (5x7) Ø 5.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$  ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		15524		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v</sub> -m			2.0:1		I <sub>F</sub> =20mA	

# TOM-2057BMY-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-2057BMY-N	AlGaInP	Ultra-yellow	Gray	White

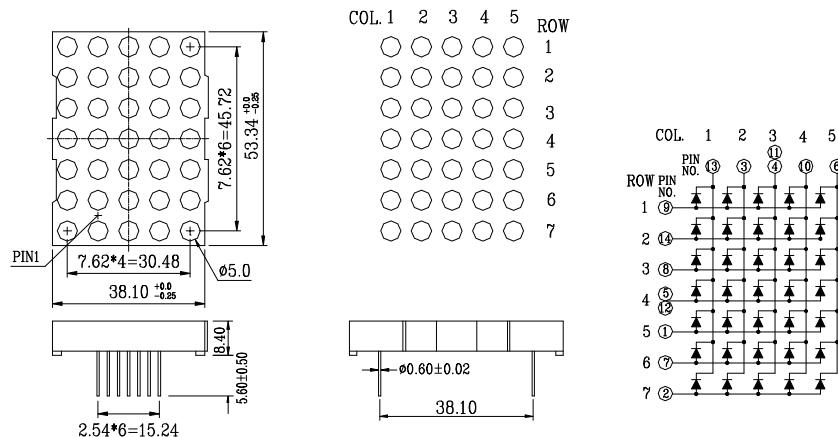
### Features

- (5x7) Ø 5.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		32907		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		590		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	1.8	2.0	2.3	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v</sub> -m			2.0:1		I <sub>F</sub> =20mA	

# TOM-3057BME-B

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-3057BME-B	AlGaInP	Ultra orange	Black	White

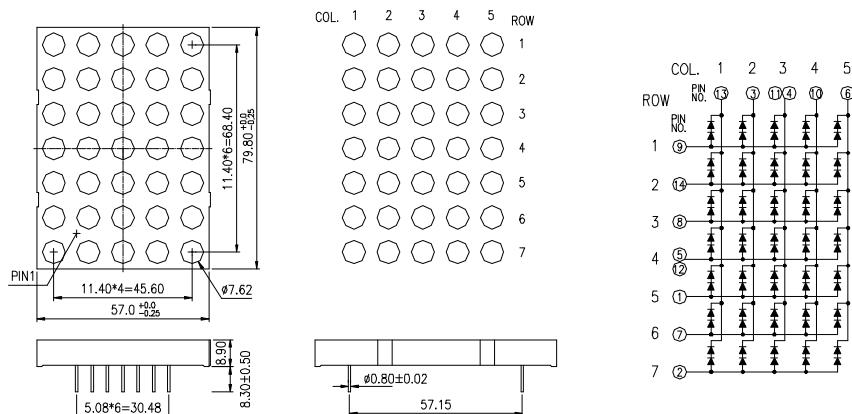
## Features

- (5x7) Ø 7.62mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	150	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	10	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature(1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		32907		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		623		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		17		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	3.6	4.0	4.6	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =10V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-4057AMR-N4

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-4057AMR-N4	AlGaInP	Ultra-red	Gray	White

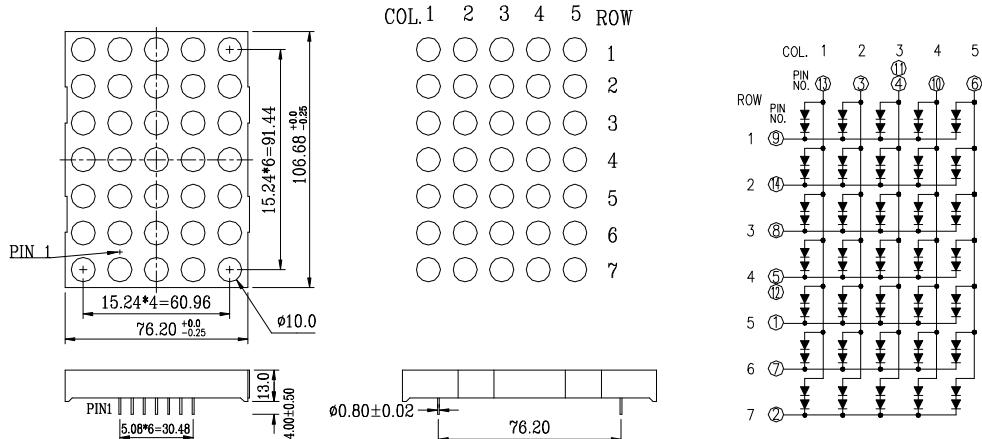
## Features

- (7x5) Ø 10.0mm dot matrix
- Row common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

## Applications

- Audio equipment
- Instrument panels
- Indoor display

## Package Dimensions & Internal Circuit Diagram



### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dot	150	mW
Continuous Forward Current	20	mA
Recommend Operating Current	12	mA
Reverse Voltage	10	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity	I <sub>v</sub>		21937		ucd	I <sub>F</sub> =10mA	
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ		15		nm	I <sub>F</sub> =20mA	
Forward Voltage	V <sub>F</sub>	3.6	4.0	4.6	V	I <sub>F</sub> =20mA	
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> =10V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			2.0:1		I <sub>F</sub> =20mA	

# TOM-4057DEG-N

## Dot Matrix Display LED

Part Number	Chip		Face Color	Segment Color
	Material	Source Color		
TOM-4057DEG-N	GaAsP	Orange	Gray	White
	GaP	Green		

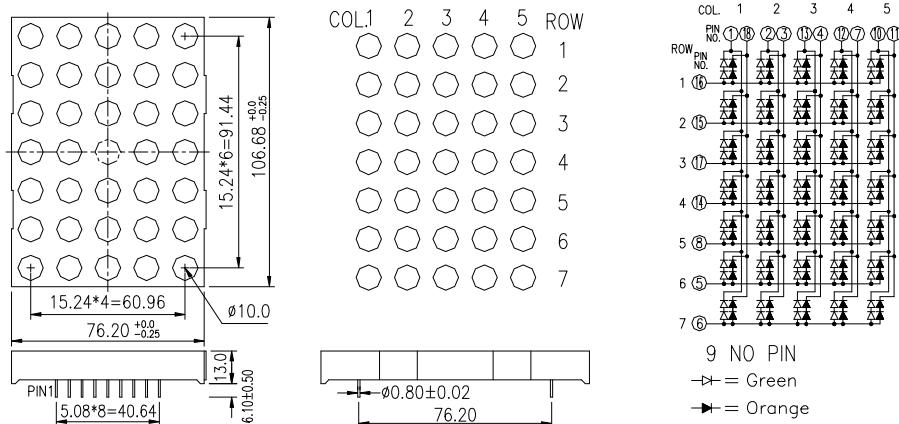
### Features

- (7x5) Ø 10.0mm dot matrix
- Row common anode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Indoor display

### Package Dimensions & Internal Circuit Diagram



#### Notes:

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$ ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation Per Dice	75	mW
Continuous Forward Current Per Dice	20	mA
Recommend Operating Current Per Dice	12	mA
Reverse Voltage Per Dice	5	V
Operating Temperature Range	-25°C to +85°C	
Storage Temperature Range	-30°C to +85°C	
Lead-Free Solder Temperature (1/16 Inch Below Seating Plane)	260°C for 3 Sec	

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition	Grade
Luminous Intensity Per Dot	I <sub>v</sub>		7066		ucd	I <sub>F</sub> =20mA	
Peak Wavelength Per Dice	λ <sub>p</sub>	E		630	nm	I <sub>F</sub> =20mA	
Peak Wavelength Per Dice	λ <sub>p</sub>	G		572	nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ	E		35	nm	I <sub>F</sub> =20mA	
Spectral Line Half-Width	△λ	G		30	nm	I <sub>F</sub> =20mA	
Forward Voltage Per Dice	V <sub>F</sub>	E	1.8	2.1	2.4	V	I <sub>F</sub> =20mA
Forward Voltage Per Dice	V <sub>F</sub>	G	1.9	2.2	2.5	V	I <sub>F</sub> =20mA
Reverse Current Per Dice	I <sub>R</sub>			20	μA	V <sub>R</sub> =5V	
Luminous Intensity Matching Rate	I <sub>v-m</sub>			1.5:1		I <sub>F</sub> =20mA	