

## 5mm Round LED (T-1 3/4)

### Features

- Popular T-1 3/4 diameter package
- Choice of various viewing angles
- Reliable and robust
- ESD-withstand voltage: up to 4KV
- RoHS compliance



T-1 3/4



### Descriptions

- The series is specially designed for applications requiring higher brightness.
- The LED lamps are available with different colors, intensities, epoxy colors, ect.
- Superior performance in outdoor environment.

### Applications

- Color graphic signs
- Message boards
- Variable message signs
- Commercial outdoor advertising

### Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
TLH-B1R5-7383-AMQAMS	InGaN	Super Blue	Water Clear

# 5mm Round LED

## TLH-B1R5-7383-AMQAMS

### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit
Reverse Voltage	<b>VR</b>	5	V
Forward Current	<b>IF</b>	30	mA
Peak Forward Current (Note 1.)	<b>IFP</b>	100	mA
Power Dissipation	<b>Pd</b>	120	mW
Electrostatic Discharge	<b>ESD</b>	4000	V
Soldering Temperature (T=5 sec)	<b>Tsol</b>	260 ±5	°C
Operating Temperature	<b>Topr</b>	-40 ~ +85	°C
Storage Temperature	<b>Tstg</b>	-40 ~ +100	°C
Zener Reverse Current	<b>Iz</b>	100	mA

**Notes** 1: Conditions: Pulse width  $\leq$  10m sec and duty  $\leq$  1/10.

### Electro-Optical Characteristics (Ta=25°C)

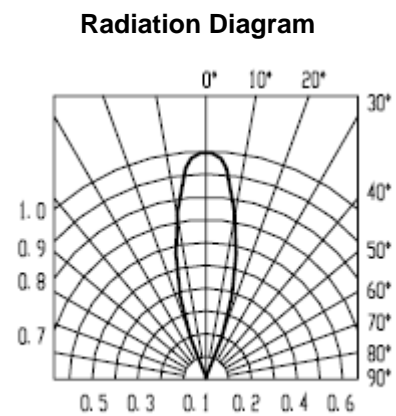
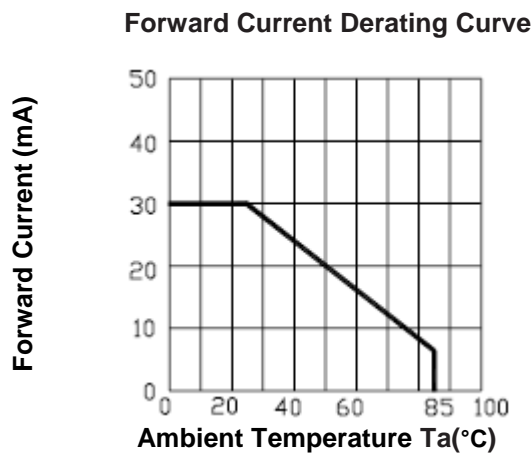
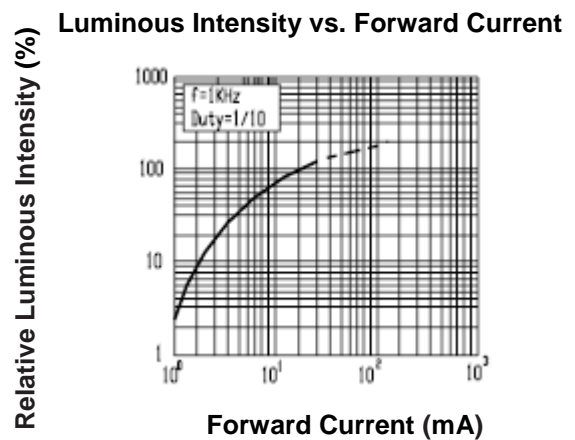
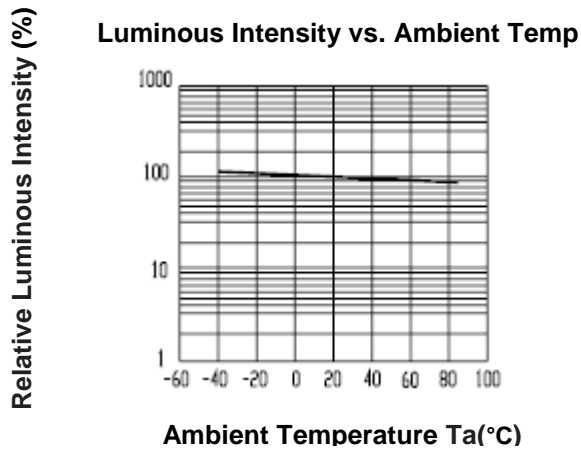
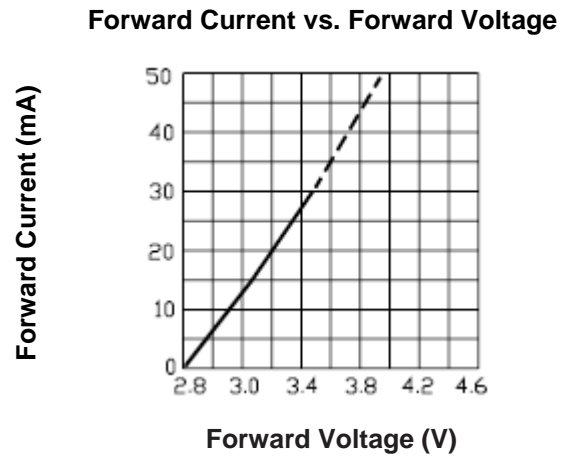
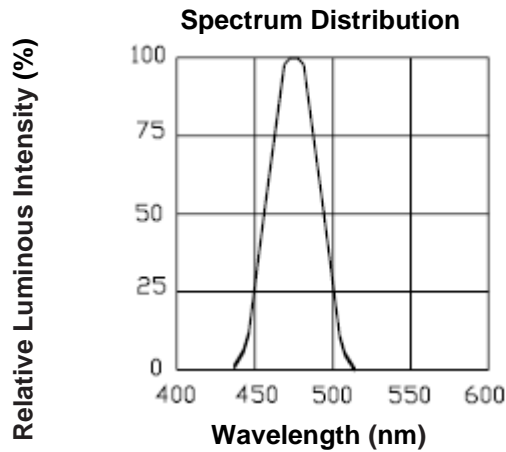
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	<b>Iv</b>	1800	-----	4500	mcd	IF =20mA
Viewing Angle	<b>2<math>\theta</math>1/2</b>	-----	30	-----	deg	
Forward Voltage	<b>VF</b>	2.8	-----	3.6	V	
Peak Wavelength	<b><math>\lambda_p</math></b>	-----	468	-----	nm	
Dominant Wavelength	<b><math>\lambda_d</math></b>	465	470	475	nm	
Spectrum Radiation Bandwidth	<b><math>\Delta\lambda</math></b>	-----	26	-----	nm	
Reverse Current	<b>IR</b>	-----	-----	50	uA	VR=5V
Zener Reverse Voltage	<b>VZ</b>	5.2	-----	-----	V	Iz =5mA

**Notes:** Tolerance of Dominant Wavelength:  $\pm$ 1.0nm

Tolerance of Luminous Intensity:  $\pm$ 15%

Tolerance of Forward Voltage:  $\pm$ 0.1V

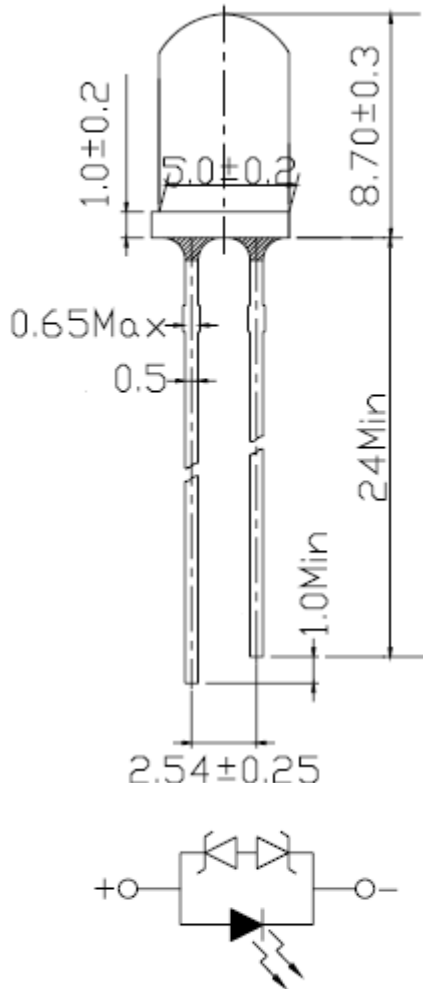
Typical Electro-Optical Characteristics Curves (Ta=25°C)



# 5mm Round LED

## TLH-B1R5-7383-AMQAMS

### Package Dimensions (In mm)



### Note:

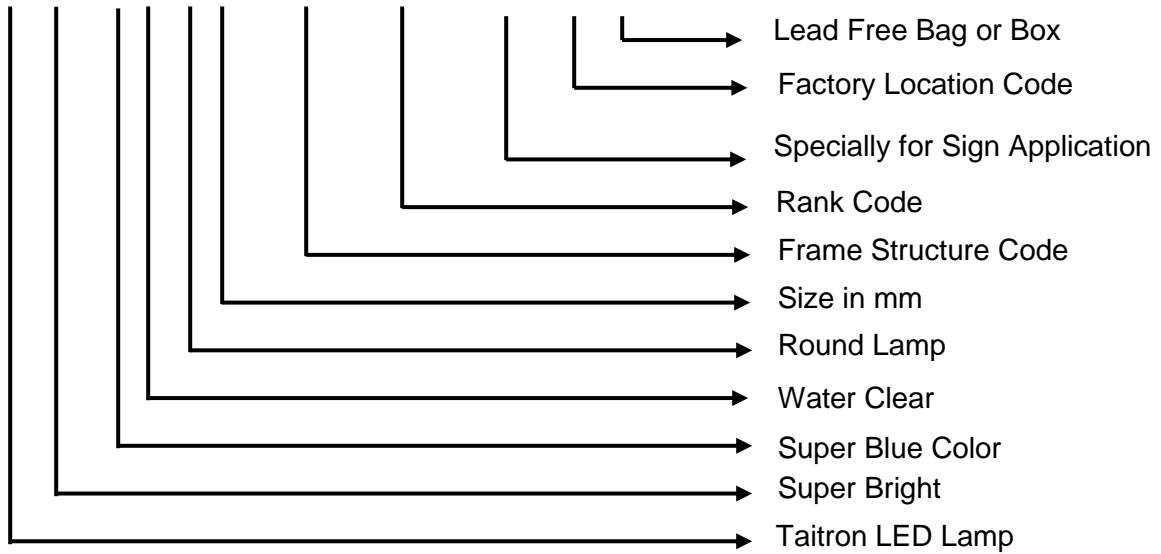
1. All dimensions are in millimeters, and tolerance is 0.25mm except being specified.
2. Lead spacing is measured where the lead emerges from the package.
3. Protruded resin under flange is 1.5mm Max. LED.

### Packing Quantity Specification

1. 500 Pcs/1 Bag, 5 Bags/1 Box
2. 10 Boxes/1 Carton

Ordering Information

TL H -B 1 R 5 - 7383 AMQA MS -92-BL

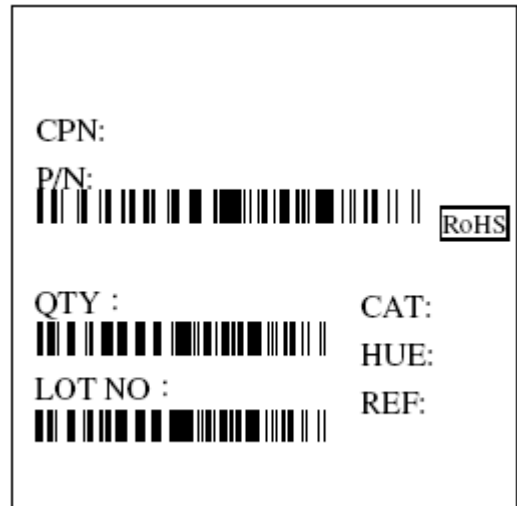


Label Explanation

CAT: Luminous Intensity and Forward Voltage Rank

HUE: Dominant Wavelength Rank

REF: Reference



## Rank Combinations

### Bin Range of Dominant Wavelength

Group	Bin Code	Min	Max	Unit	Condition
A	1	465	470	nm	IF=20mA
	2	470	475		

### Bin Range of Luminous Intensity

Bin Code	Min	Max	Unit	Condition
M	1800	2250	mcd	IF=20mA
N	2250	2850		
P	2850	3600		
Q	3600	4500		

### Bin Range of Forward Voltage

Group	Bin Code	Min	Max	Unit	Condition
A	0	2.8	3.0	V	IF=20mA
	1	3.0	3.2		
	2	3.2	3.4		
	3	3.4	3.6		

**Notes:** Tolerance of Dominant Wavelength:  $\pm 1.0\text{nm}$

Tolerance of Luminous Intensity:  $\pm 15\%$

Tolerance of Forward Voltage:  $\pm 0.1\text{V}$

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