**Type - White Diffused** 

# **5mm THROUGH HOLE LED**

#### **SELECTION GUIDE:**

Model	Emitting light colors	Ontology color		
ML504I-HD/YG-C	Red/Green	White Diffused		

### APPLICABLE SCOPE

This specification is applied to double dip LED products.

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	120	mW
Forward Pulse Current	IFPM	100	mA
Forward Current	IFM	30	mA
Reverse Voltage	VR	5	V
Operating Temperature	Topr	<i>-</i> 25∼+85	${\mathbb C}$
Storage Temperature	Tstg	-40~+85	$^{\circ}\!\mathbb{C}$
Soldering Heat (3s)	Tsol	260	$^{\circ}$

## **OPTOELECTRIC CHARACTERISTICS(Ta=25°C):**

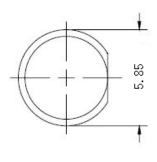
	Symbol Test Condition	Value							
parameter			Min		Тур		Max		Unit
			Red	Green	Red	Green	Red	Green	
Forward Voltage	$V_{\scriptscriptstyle F}$	I <sub>F</sub> =20mA	1.9	2.0	2.1	2.3	2.1	2.45	V
Luminous Intensity	Iv	I <sub>F</sub> =20mA	12	15	20	25			mcd
Dominate Wave Length	$\lambda_{ ext{P}}$	I <sub>F</sub> =20mA	620	567	630	570	640	577	nm

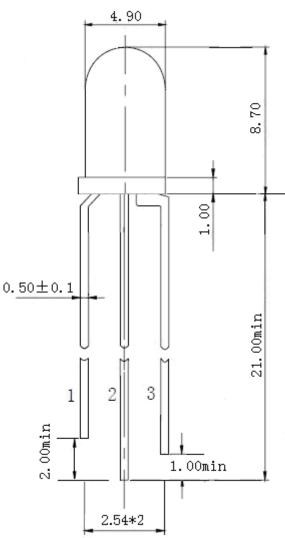


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### **DIMENSION**





1: Red Anode

2: Cathode

3: Green Anode

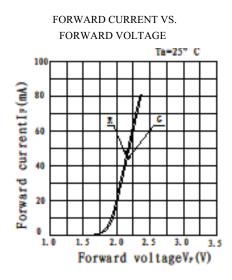
tolerance:  $\pm 0.2$ mm

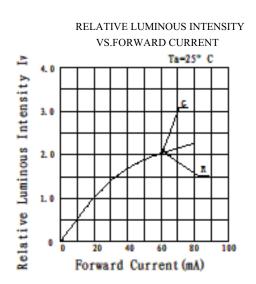


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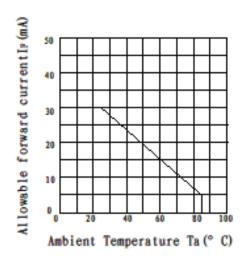
## 5mm THROUGH HOLE LED

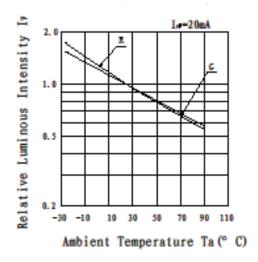
### RATING AND CHARACTERISTIC CURVES ML504I-HD/YG-C



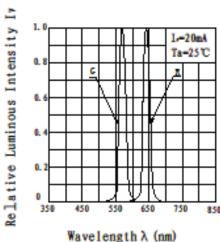


#### FORWARD CURRENT VS. AMBIENT TEMPERATURE RELATIVE INTENSITY VS. AMBIENT TEMPERATURE





#### RELATIVE INTENSITY VS. WAVELENGTH



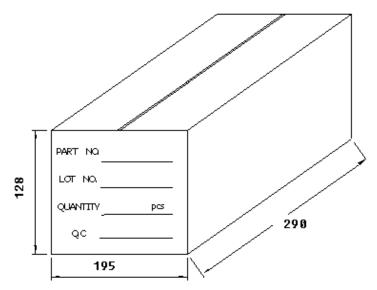
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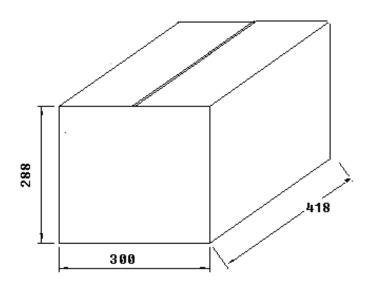
## **5mm THROUGH HOLE LED**

#### 1.PACKING

- 1.1Internally packed with plastic bag anti-statically, 1000pcs/bag.
- 1.2 Internal Packed with white cartons, 6000pcs/carton
- 1.3 External Packed with brown cartons, 24000pcs/carton Inside box :



Outside the box:







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## **5mm THROUGH HOLE LED**

#### 2. PRECAUTIONS FOR USE

- 2.1 Forming
- 2.1.1Leads should be formed before soldering.
- 2.1.2 Do not form the leads with their bases near the epoxy body as a fulcrum.
- 2.1.3 Forming location should be up to 5mm from the epoxy body, if it has to be formed under 5mm ( $\geq$ 2mm),

special fixture should be made. When forming, the lead frame near to epoxy body should be secured to lessen the

stress on the body in order to avoid LED open circuit and crack because of over stress.

### 2.2 Storage

- 2.2. 1 The LEDs should be stored at 30°C or less and 70%RH or less after being shipped and the storage life limits are 3 months. If the LEDs are stored for 3 months or more, they can be stored for a year in a sealed container with a nitrogen atmosphere and moisture absorbent material.
- 2.2. 2 After the bag is opened, It is recommended that the LEDs be used as soon as possible. Mounted within 2days at factory conditions of  $\leq 30^{\circ}\text{C}$  /60%RH. LED led frames are silver plated iron alloy. The silver surface may be affected by environments which contain corrosive gasses and so on. Please avoid conditions which may be cause the LED to corrodes, tarnish or discolor. This corrosion or discoloration may cause difficulty during soldering operations.
- 2.3 Installation
- 2.3.1 Installation on PCB does not apply physical stress to the leads when mounting LED lamps on PCB.

#### Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.