

L-53HD-TNR2.54, L-53HD-TNR5/7	BRIGHTRED
L-53ID-TNR2.54, L-53ID-TNR5/7	HIGHEFFICIENCYRED
L-53GD-TNR2.54, L-53GD-TNR5/7	GREEN
L-53YD-TNR2.54, L-53YD-TNR5/7	YELLOW
L-53AD-TNR2.54, L-53AD-TNR5/7	YELLOW

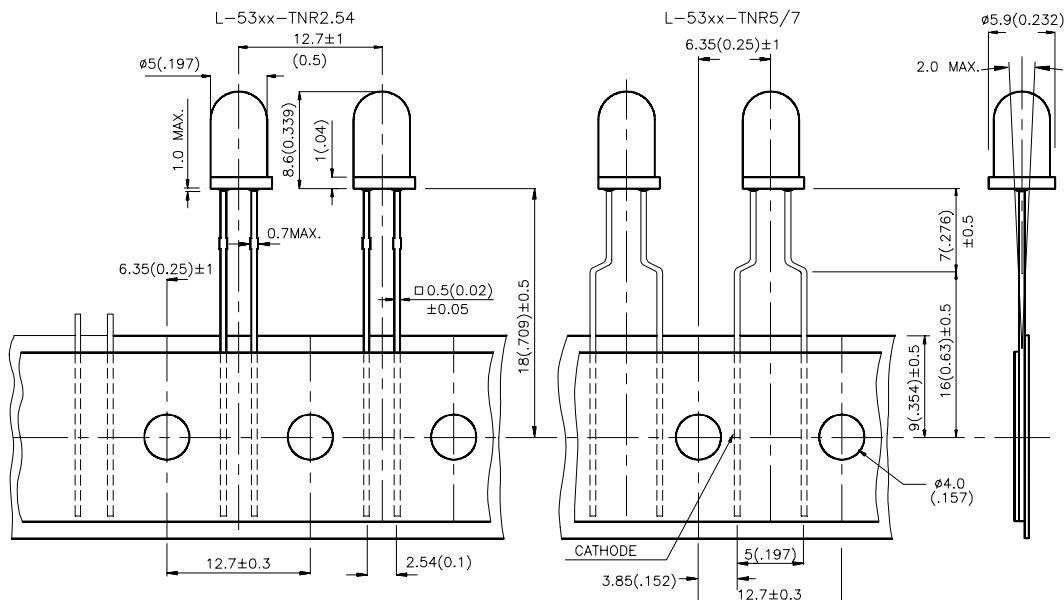
Features

- FOR THE USE OF AUTOMATIC INSERTION MACHINE.
- 5mm FORMED LEAD AND 2.54mm STRAIGHT LEAD.
- SPACING AVAILABLE.
- RECTANGULAR LED LAMPS ALSO AVAILABLE IN TAPE & REEL PACKAGE.
- AMMO PACKS ALSO AVAILABLE.

Description

- The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.
- The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.
- The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.
- The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	I _v (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	
L-53HD-TNR2.54 L-53HD-TNR5/7	BRIGHT RED (GaP)	RED DIFFUSED	2	5	60°
L-53ID-TNR2.54 L-53ID-TNR5/7	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	25	60°
L-53GD-TNR2.54 L-53GD-TNR5/7	GREEN (GaP)	GREEN DIFFUSED	5	20	60°
L-53YD-TNR2.54 L-53YD-TNR5/7	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	20	60°
L-53AD-TNR2.54 L-53AD-TNR5/7	YELLOW (GaAsP/GaP)	AMBER DIFFUSED	5	20	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

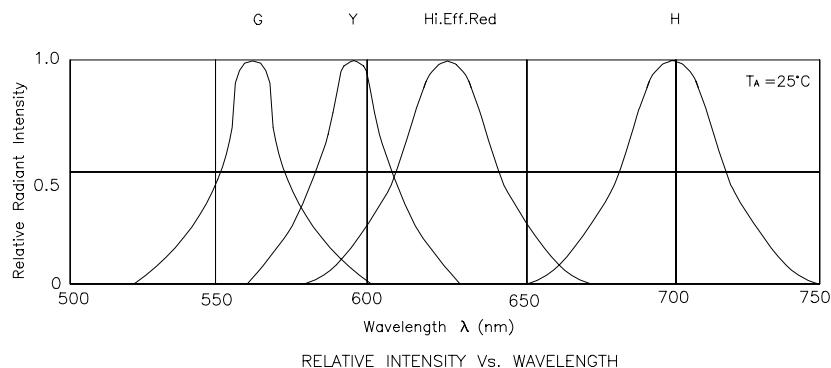
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Bright Red High Efficiency Red Green Yellow	700 627 565 590		nm	IF=20mA
λ D	Dominate Wavelength	Bright Red High Efficiency Red Green Yellow	660 625 568 588		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Bright Red High Efficiency Red Green Yellow	45 45 30 35		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Green Yellow	40 15 15 20		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Bright Red High Efficiency Red Green Yellow	2.25 2.0 2.2 2.1	2.5 2.5 2.5 2.5	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

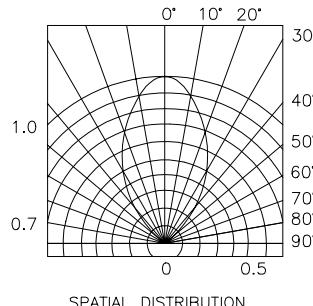
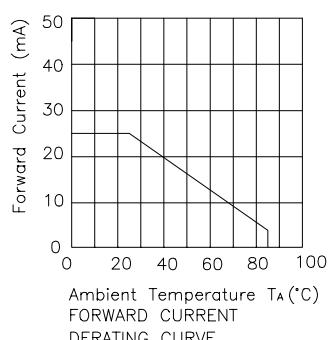
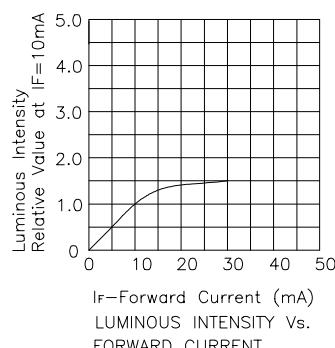
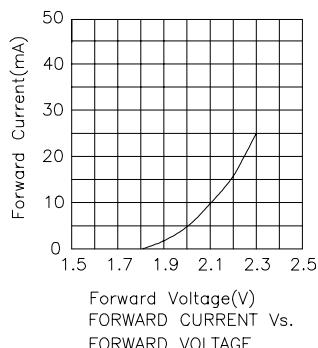
Parameter	Bright Red	High Efficiency Red	Green	Yellow	Units
Power dissipation	120	105	105	105	mW
DC Forward Current	25	30	25	30	mA
Peak Forward Current [1]	120	160	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	260°C For 5 Seconds				

Notes:

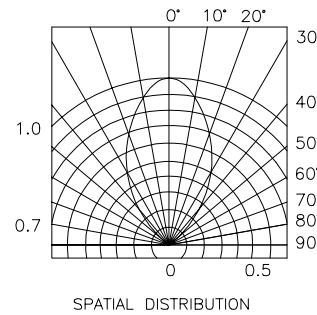
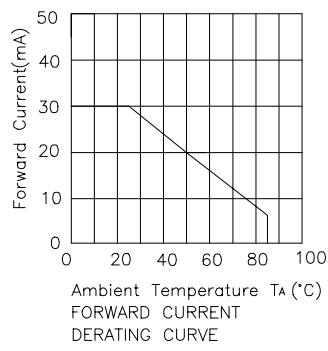
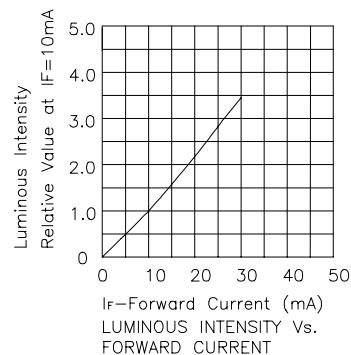
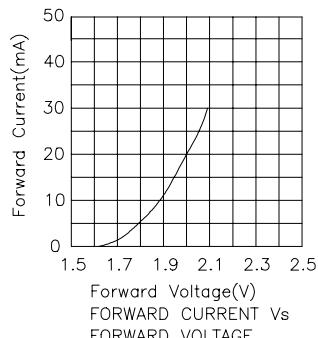
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



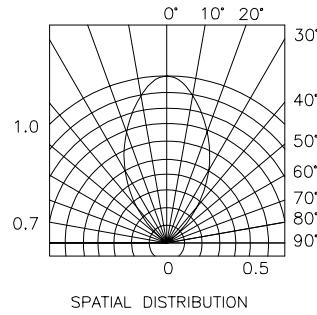
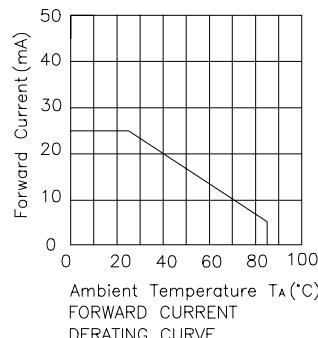
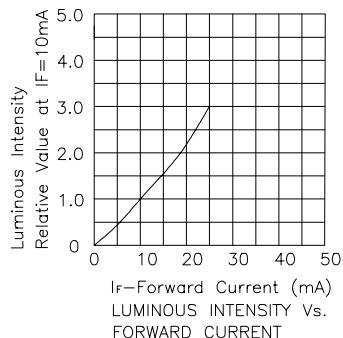
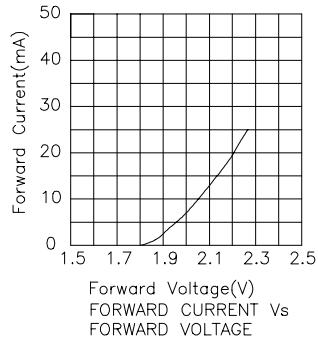
Bright Red L-53HD-TNR2.54, L-53HD-TNR5/7



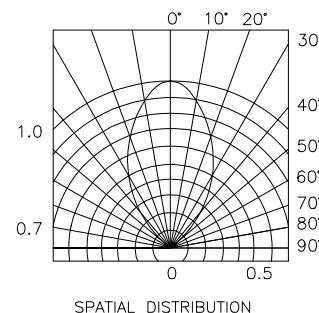
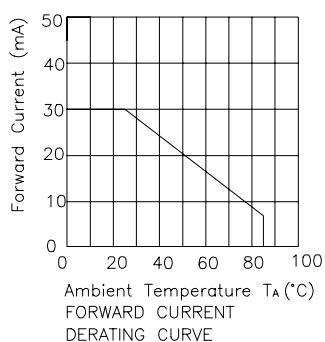
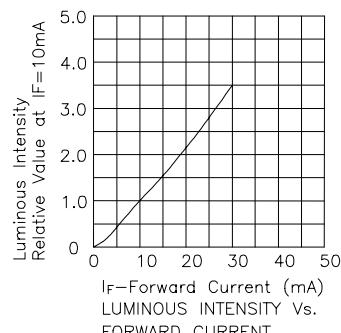
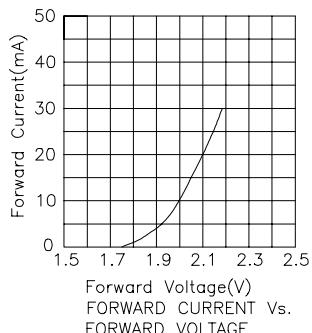
High Efficiency Red L-53ID-TNR2.54, L-53ID-TNR5/7



Green L-53GD-TNR2.54, L-53GD-TNR5/7



Yellow L-53YD-TNR2.54, L-53AD-TNR2.54, L-53YD-TNR5/7, L-53AD-TNR5/7



Reel Dimensions

