

L53HDTNR254, L53HDTNR5/7	BRIGHT RED
L53IDTNR254, L53IDTNR5/7	HIGH EFFICIENCY RED
L53GDTNR254, L53GDTNR5/7	GREEN
L53YDTNR254, L53YDTNR5/7	YELLOW
L53ADTNR254, L53ADTNR5/7	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

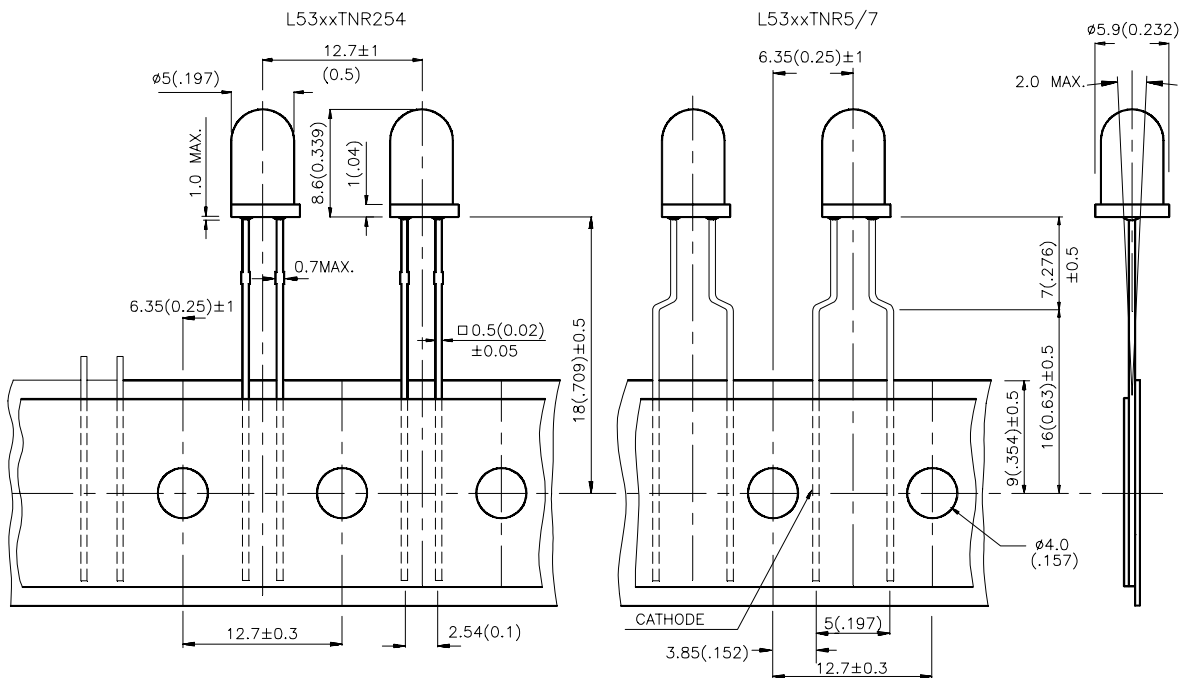
The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

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 ± 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	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
L53HDTNR254 L53HDTNR5/7	BRIGHT RED (GaP)	RED DIFFUSED	2	5	60°
L53IDTNR254 L53IDTNR5/7	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	25	60°
L53GDTNR254 L53GDTNR5/7	GREEN (GaP)	GREEN DIFFUSED	5	20	60°
L53YDTNR254 L53YDTNR5/7	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	20	60°
L53ADTNR254 L53ADTNR5/7	YELLOW (GaAsP/GaP)	AMBER DIFFUSED	5	20	60°

Note:

1. θ 1/2 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

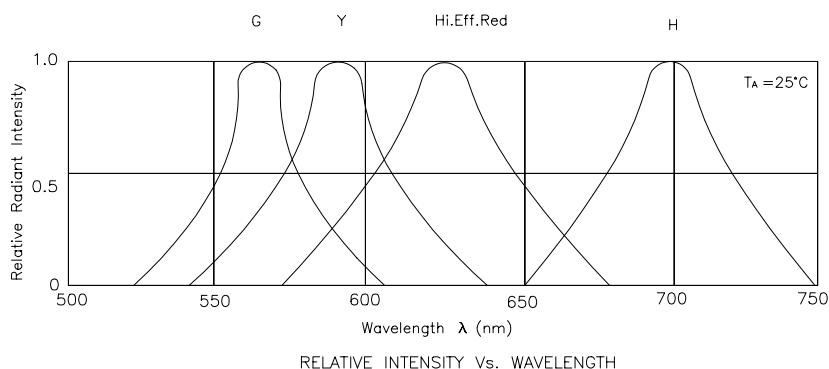
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Bright Red High Efficiency Red Green Yellow	700 627 565 590		nm	IF=20mA
λ_D	Dominate Wavelength	Bright Red High Efficiency Red Green Yellow	660 625 568 588		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Bright 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 $T_A=25^{\circ}\text{C}$

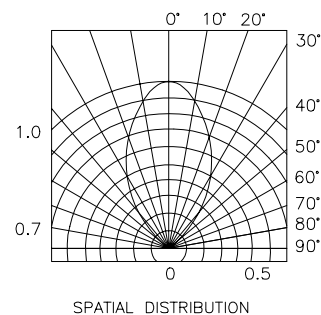
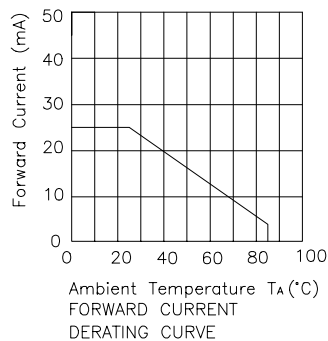
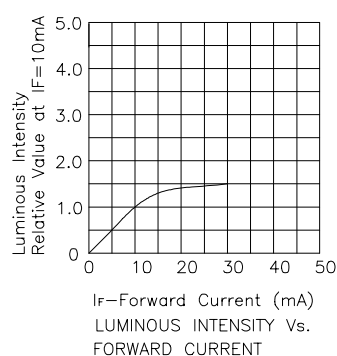
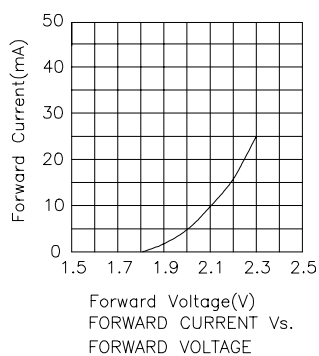
Parameter	Bright Red	High Efficiency Red	Green	Yellow	Units
Power dissipation	120	105	105	105	mW
DC Forward Current	25	30	25	30	mA
Peak Forward Current [1]	120	160	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To $+85^{\circ}\text{C}$				
Lead Solder Temperature [2]	260 $^{\circ}\text{C}$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

Notes:

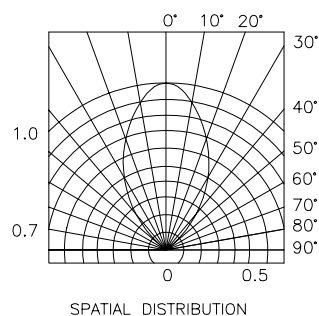
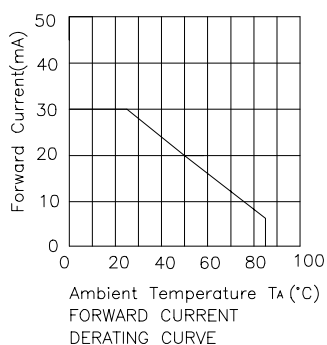
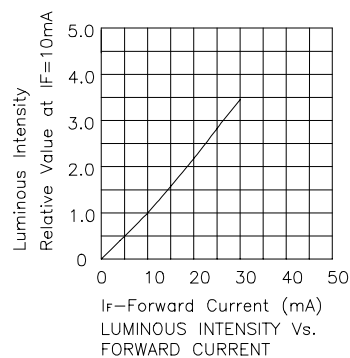
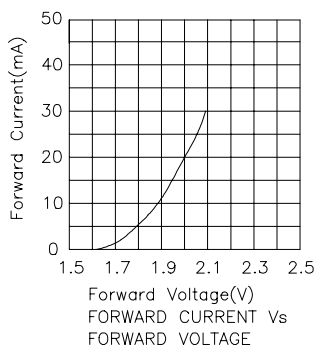
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



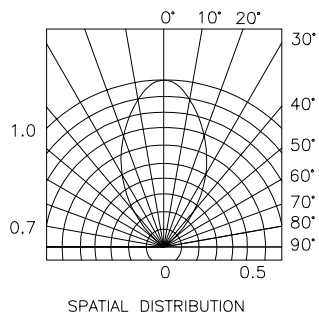
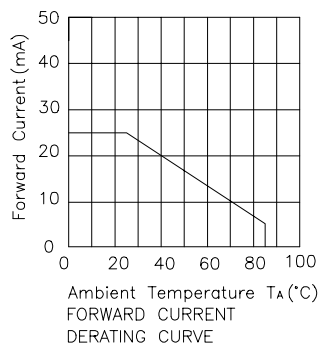
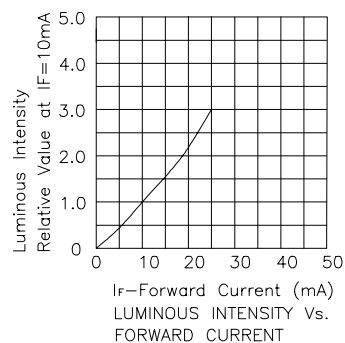
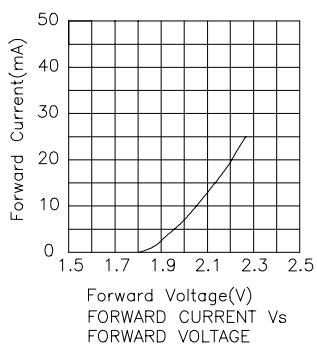
Bright Red L53HDTNR254, L53HDTNR5/7



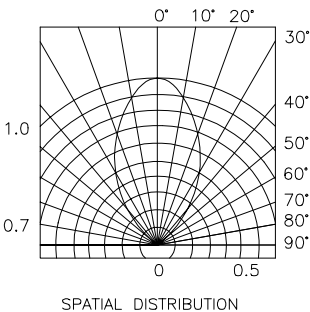
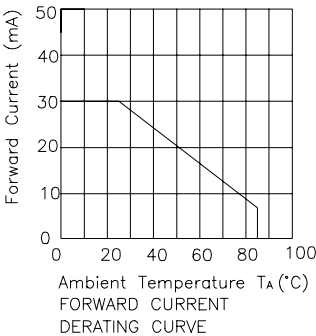
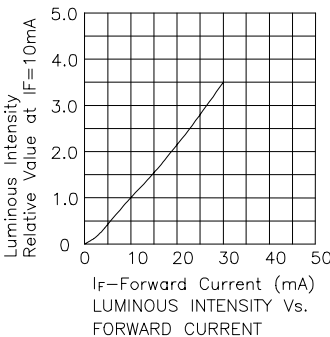
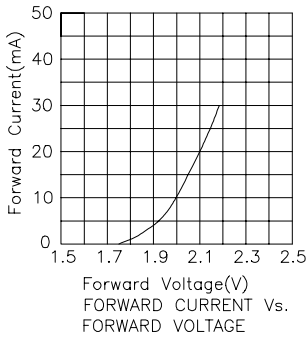
High Efficiency Red L53IDTNR254, L53IDTNR5/7



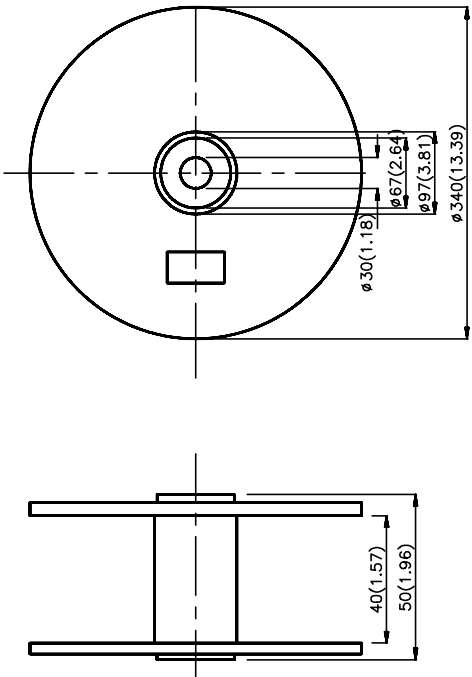
Green L53GDTNR254, L53GDTNR5/7



Yellow L53YDTNR254, L53ADTNR254, L53YDTNR5/7, L53ADTNR5/7



Reel Dimensions



ANODE LEAD
LEAVES THE REEL FIRST

