TAPE AND REEL LED LAMPS

L34HDTNR254, L34HDTNR5/7 BRIGHTRED

L34IDTNR254, L34IDTNR5/7 HIGH EFFICIENCY RED

L34GDTNR254,L34GDTNR5/7 GREEN L34YDTNR254,L34YDTNR5/7 YELLOW L34ADTNR254,L34ADTNR5/7 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.

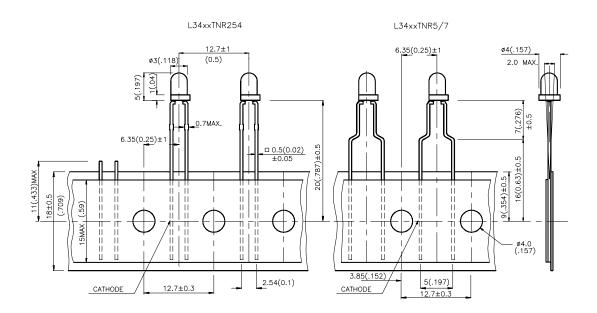
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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.

PAGE: 1 OF 5

Package Dimensions



Notes:

- 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.

SPEC NO: CDA0818 REV NO: V.1 DATE: NOV/17/2001
APPROVED: J.LU CHECKED: DRAWN: J.X.FU

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 10 mA		Viewing Angle
			Min.	Тур.	201/2
L34HDTNR254 L34HDTNR5/7	BRIGHT RED (GaP)	RED DIFFUSED	1	3	60°
L34IDTNR254 L34IDTNR5/7	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	25	60°
L34GDTNR254 L34GDTNR5/7	GREEN (GaP)	GREEN DIFFUSED	5	20	60°
L34YDTNR254 L34YDTNR5/7	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	10	60°
L34ADTNR254 L34ADTNR5/7	YELLOW (GaAsP/GaP)	AMBER DIFFUSED	5	10	60°

Note

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Bright Red High Efficiency Red Green Yellow	700 627 565 590		nm	IF=20mA
λD	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
С	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

SPEC NO: CDA0818 APPROVED: J.LU REV NO: V.1 CHECKED:

DATE: NOV/17/2001 DRAWN: J.X.FU PAGE: 2 OF 5

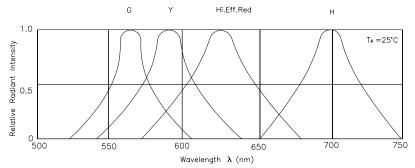
^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Absolute Maximum Ratings at T_A=25°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				

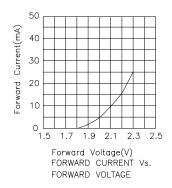
Notes

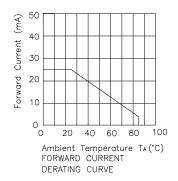
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

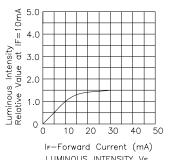


RELATIVE INTENSITY Vs. WAVELENGTH

Bright Red L34HDTNR254, L34HDTNR5/7

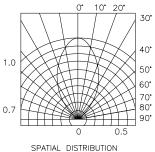






LUMINOUS INTENSITY Vs.
FORWARD CURRENT

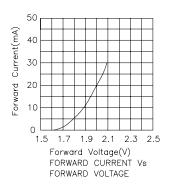
0° 10° 20°

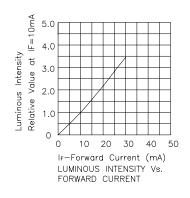


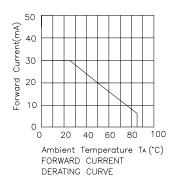
SPEC NO: CDA0818 APPROVED: J.LU REV NO: V.1 CHECKED:

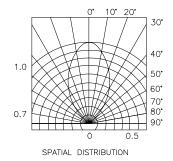
DATE: NOV/17/2001 DRAWN: J.X.FU PAGE: 3 OF 5

High Efficiency Red L34IDTNR254, L34IDTNR5/7

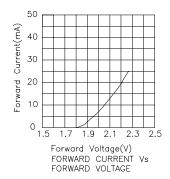


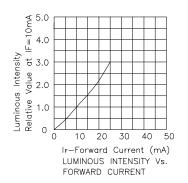


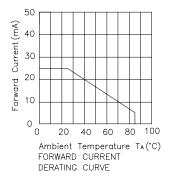


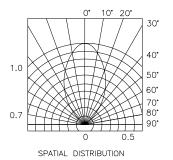


Green L34GDTNR254, L34GDTNR5/7









SPEC NO: CDA0818 APPROVED: J.LU REV NO: V.1 CHECKED: DATE: NOV/17/2001 DRAWN: J.X.FU PAGE: 4 OF 5

Yellow L34YDTNR254, L34ADTNR254, L34YDTNR5/7, L34ADTNR5/7 5.0 Luminous Intensity Relative Value at IF=10mA Forward Current(mA) 4.0 30 3.0 0 IF-Forward Current (mA) LUMINOUS INTENSITY Vs. Forward Voltage(V) FORWARD CURRENT Vs. FORWARD VOLTAGE FORWARD CURRENT 30° Forward Current (mA) 40° 20 70° 80° 40 60 Ambient Temperature TA (°C) FORWARD CURRENT DERATING CURVE SPATIAL DISTRIBUTION **Reel Dimensions** ANODE LEAD LEAVES THE RELL FIRST 40(1.57) 50(1.96)

SPEC NO: CDA0818 APPROVED: J.LU REV NO: V.1 CHECKED: DATE: NOV/17/2001 DRAWN: J.X.FU PAGE: 5 OF 5