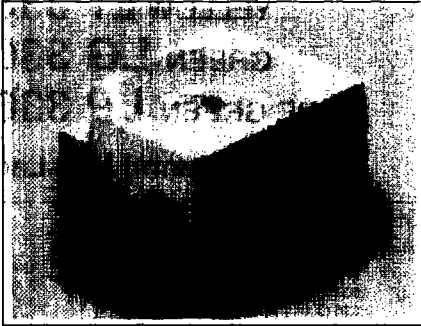
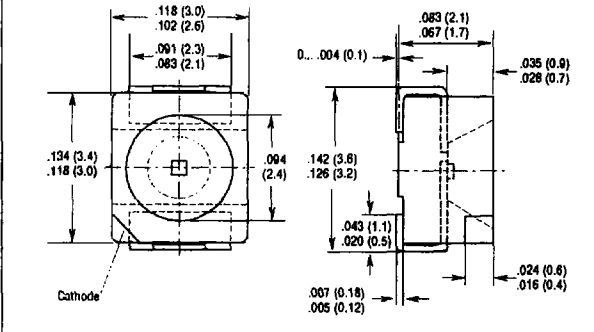


### Hyper Red, SMT-TOP-LED™ Surface Mount LED Lamp



Package Dimensions in Inches (mm)



#### FEATURES

- PL-CC-2 Package
- Internal Reflector
- Colorless Clear Window
- Low Power Dissipation
- Wide Viewing Angle
- Compatible with Automatic Placement Equipment
- Suitable for Vapor-Phase, Reflow, Infrared Reflow and Wave Solder Processes
- Ideal for Backlight and Light Pipe Applications

#### DESCRIPTION

The LH T674 is a double heterojunction LED with a package that incorporates an internal reflector to optimize light coupling. This feature makes the SMT-TOPLED ideal for light pipe applications.

#### Maximum Ratings

Operating Temperature Range ( $T_{OP}$ )	-55°C to + 100°C
Storage Temperature Range ( $T_{STG}$ )	-55°C to + 100°C
Junction Temperature ( $T_J$ )	+ 100°C
Reverse Voltage ( $V_R$ )	3 V
Forward Current ( $I_F$ )	30 mA
Surge Current ( $I_{FS}$ ) $t_p = 10$ ms	0.5 A
Power Dissipation ( $P_{TOT}$ ) $T_A \leq 25^\circ\text{C}$	100 mW
Thermal Resistance, Junction to Ambient	
For mounting on PC Board, $\geq 16$ mm <sup>2</sup> ( $R_{THJA}$ )	400 K/W

#### Characteristics ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Units
Peak Wavelength ( $I_F = 10$ mA)	$\lambda_{PEAK}$	660	nm
Dominant Wavelength ( $I_F = 10$ mA)	$\lambda_{DOM}$	645	nm
Spectral Bandwidth (50% $I_{RELMAX}$ $I_F = 10$ mA)	$\Delta\lambda$	22	nm
Viewing Angle 50% $I_V$	$2\phi$	120	Deg.
Forward Voltage ( $I_F = 10$ mA)	$V_F$	1.75	V
		( $\leq 2.6$ )	
Reverse Current ( $V_R = 5$ V)	$I_R$	0.01	$\mu\text{A}$
		( $\leq 10$ )	
Capacitance ( $V_R = 0$ V, $f = 1$ MHz)	$C_r$	25	pF
Response Time ( $I_F = 100$ mA, $t_p = 10$ $\mu\text{s}$ , $R_L = 50$ $\Omega$ )			
Rise Time/ $I_V$ , 10%-90%	$t_R$	140	ns
Fall Time/ $I_V$ , 10%-90%	$t_F$	110	ns
Luminous Intensity (mcd)*			

Part Number	Symbol	Min.	Max.	Test Condition
LH T674-KM	$I_V$	6.3	32.0	10 mA
LH T674-L	$I_V$	10.0	20.0	10 mA
LH T674-LN	$I_V$	10.0	50.0	10 mA
LH T674-M	$I_V$	16.0	32.0	10 mA

See graph number 1, 2V, 3A, 4B, 5G, 6H, 7A, 8A, 9A, 10B in the back of this section.

\* Luminous intensity factor of  $I_V$  of one packaging unit  $I_{VMAX}/I_{VMIN} \geq 2$