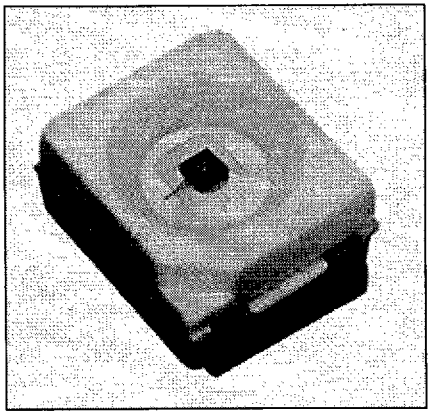
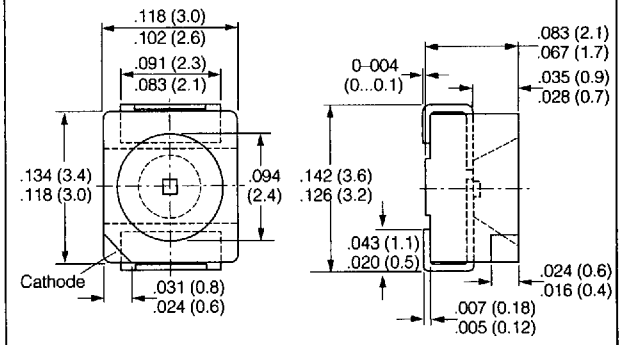
SIEMENS

SUPER-RED LST672
ORANGE LOT672
YELLOW LYT672
GREEN LGT672
PURE GREEN LPT672
HIGH-CURRENT SUPER SMT-TOP-LED®



Package Dimensions in Inches (mm)



FEATURES

- **White Package**
- **PL-CC-2 Package**
- **Internal Reflector**
- **Low Power Dissipation**
- **Wide Viewing Angle**
- **Suitable for Vapor-Phase Reflow, Infrared Reflow and Wave Solder Processes**
- **Compatible with Automatic Placement Equipment**
- **Optical Indicator**
- **Colorless Clear Window**
- **Appropriate for High Ambient Light Due to Higher Operating Current (≤50 mA DC)**
- **Ideal for Backlighting, Optical Coupling into Light Pipes and Lenses**
- **Load Dump Resistant acc. to DIN 40839**

DESCRIPTION

The LX T672 (Super-TOP-LED for surface mount applications) is available in super-red, orange, yellow, green, and pure green. The package incorporates an internal reflector to optimize light coupling. This feature makes the SMT-TOP-LED ideal for light pipe applications.

The large LED chip allows the part to be driven at a current of 50 mA for increased luminous intensity.

Maximum Ratings

Operating Temperature Range (T_{OP}) ..... –55 to +100°C
Storage Temperature Range (T_{STG}) ..... –55 to +100°C
Junction Temperature (T_J) ..... +100°C
Forward Current (I_F) ..... 50 mA
Surge Current (I_{FM}) t≤10 µs D=0.005 ..... 1 A
Reverse Voltage (V_R) ..... 5 V
Power Dissipation (P_{TOT}) T_A≤25°C ..... 190 mW
Thermal Resistance, Junction Air,
Mounted on PC Board, pad size 16 mm² (1)
(R_{THJA}) ..... 300 K/W
Junction Solderpoint (R_{THJS}) ..... 250 K/W
Note: PC board G30/FR4

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

Characteristics (T_A=25°C) All values typical unless otherwise noted

Parameter		Symbol	Values					Unit
			Super Red	Orange	Yellow	Green	Pure Green	
Peak Wavelength (I_F=10 mA)		λ_{PEAK}	635	610	586	565	557	nm
Dominant Wavelength (I_F=10 mA)		λ_{DOM}	628	605	590	570	560	nm
Spectral Bandwidth (50% I_{RELMAX}) (I_F=10mA)		$\Delta\lambda$	45	40	45	25	22	nm
Viewing Angle, 50%, I_V		2φ	120	120	120	120	120	Deg.
Forward Voltage (I_F=50 mA)	Typ.	V_F	2.0	2.4	2.4	2.6	2.6	V
	Max		3.8	3.8	3.8	3.8	3.8	
Reverse Current (V_R=5 V)	Typ.	I_R	0.01	0.01	0.01	0.01	0.01	µA
	Max		10	10	10	10	10	
Capacitance (V_R=0 V, f=1 MHz)		C_0	40	35	35	60	80	pF
Switching times (I_F=100 mA) (t_P=10 µs, R_L=50 Ω)	I_V, 10%–90%	t_R	350	500	350	500	500	ns
	I_V, 90%–10%	t_F	200	250	200	250	250	

Luminous Intensity Ratio in One Packaging Unit $I_{VMAX}/I_{VMIN} \geq 2.0$ (1)

Type	Light Emitting Color	Luminous Intensity, I_F=50 mA, I_V (mcd)	
		Min.	Max.
LST672-LN	Super-red	10	50
LST672-M		16	32
LST672-N		25	50
LST672-MQ		16	125
LO,LY,LG T672-LN	Orange, Yellow, Green	10	50
LO,LY,LG T672-N		25	50
LO,LY,LG T672-P		40	80
LO,LY,LG T672-MQ		16	125
LPT672-KM	Pure Green	6.3	32
LPT672-L		10	20
LPT672-M		16	32
LPT672-LP		10	80

Note: In case of MULTILED® with two chips of the same emission wavelength, the sum of the brightness determines the brightness group of the LED.