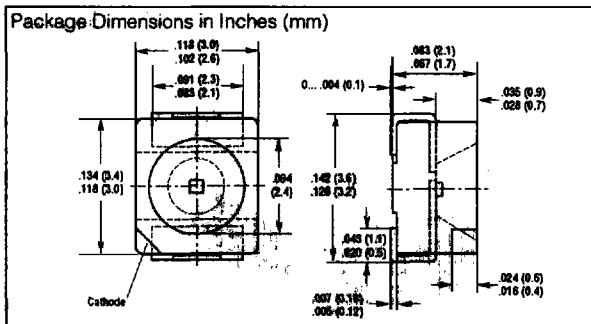
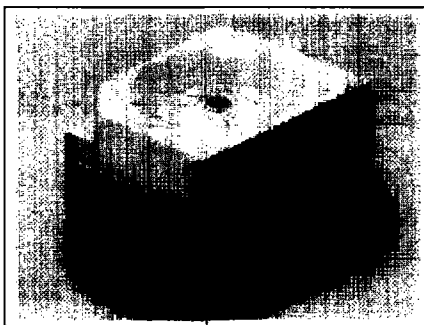


SIEMENS

SUPER-RED LS T679-CO YELLOW LY T679-CO GREEN LG T679-CO

Low Current SMT-TOP-LED®, Surface Mount LED Lamp



FEATURES

- PL-CC-2 Package
- Internal Reflector
- Colorless Clear Window
- Low (2 mA) Current Operation
- 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 LX T679-CO (SMT-TOP-LED for surface mount applications) is available in super-red, yellow, and green. The package incorporates an internal reflector to optimize light coupling. This feature makes the SMT-TOP-LED ideal for light pipe applications.

The low current requirement makes this part ideal for portable equipment or any other application where power is at a premium.

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
Forward Current (I_F)	7.5 mA
Surge Current (I_{FS}) $t_p = 10 \mu s$	0.15 A
Reverse Voltage (V_R)	5 V
Power Dissipation (P_{TOT}) $T_A \leq 25^\circ C$	20 mW
Thermal Resistance, Junction to Ambient ⁽¹⁾	500 K/W
For mounting on Al_2O_3 ceramic substrate	
15 mm X 16.7 mm X 0.7 mm (R_{thJA})	300 K/W
For mounting on PC Board (R_{thJA})	450 K/W

Note:

1. Soldered on PC board: pad size $\geq 16 \text{ mm}^2$.

Characteristics ($T_A = 25^\circ C$)

Parameter	Symbol	Super-Red	Yellow	Green	Unit
Peak Wavelength ($I_F = 7.5 \text{ mA}$)	λ_{PEAK}	635	586	565	nm
Dominant Wavelength ($I_F = 7.5 \text{ mA}$)	λ_{DOM}	628	590	570	nm
Viewing Angle 50%, I_V	2 ϕ	120	120	120	Deg.
Forward Voltage ($I_F = 2 \text{ mA}$)	V_F	1.8 (≤ 2.6)	2.0 (≤ 2.7)	1.9 (≤ 2.6)	V
Reverse Current ($V_R = 5 \text{ V}$)	I_R	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	μA
Capacitance ($V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$)	C_0	3	3	15	pF
Response Time ($I_F = 100 \text{ mA}$, $t_p = 10 \mu s$, $R_L = 50 \Omega$)					
Rise Time/ I_V , 10%–90%	t_R	200	200	450	ns
Fall Time/ I_V , 90%–10%	t_F	150	150	200	ns
Luminous Intensity ($I_F = 2 \text{ mA}$)	I_V	1 (≥ 25)	1 (≥ 25)	1 (≥ 25)	mod

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

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