

SIEMENS

T-41-21

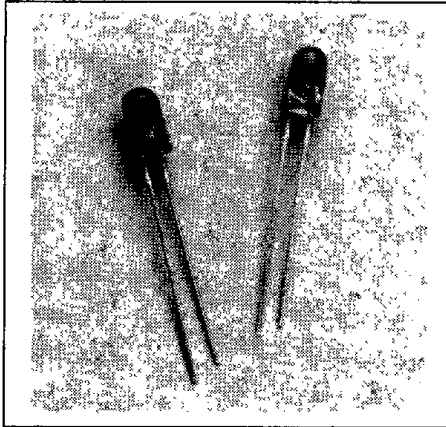
RED LR 5480

SUPER-RED LS 5480

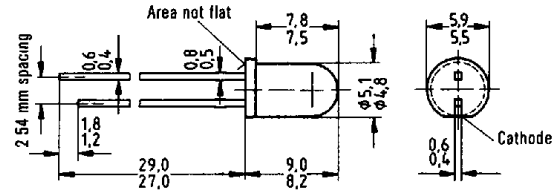
YELLOW LY 5480

GREEN LG 5480

T1³/₄ (5 mm) LED LAMP



Package Dimensions mm



Approx. weight 0.35 g

FEATURES

- Diffused Lens
- Wide Viewing Angle 80°
- Without Standoffs
- T1³/₄ (5 mm) Package Size
- 1" Lead Length
- I/C Compatible

DESCRIPTION

The LR 5480 series is a standard red gallium arsenide phosphide (GaAsP) LED lamp. The LS 5480 super-red and LY 5480 yellow are premium high efficiency light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LG 5480 green is a gallium phosphide (GaP) lamp. All have a diffused plastic lens which emits a full flooded intense light.

Maximum Ratings

Reverse Voltage (V_R)		5 V
Forward Current (I_F)		45 mA
Surge Current ($t \leq 10 \mu s$) (I_{FS})		1 A
Storage Temperature Range (T_{STG})		-55°C to +100°C
Junction Temperature (T_J)		100°C
Total Power Dissipation (P_{TOT}) $T_A=25^\circ C$		150 mW
Thermal Resistance Junction to Air (R_{THA})		500 K/W

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

Parameter	Symbol	LR 5480 Red	LS 5480 Super-Red	LY 5480 Yellow	LG 5480 Green	Unit
Wavelength at						
Peak Emission	λ_{PEAK}	660	635	586	565	nm
Dominant Wavelength	λ_{DOM}	645	628	590	567	nm
Viewing Angle (Limits for 50% of Luminous Intensity I_θ)	ϕ	80	80	80	80	Deg.
Forward Voltage ($I_F=10$ mA)	V_F	1.6 (≤ 2.0)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	V
Reverse Current ($V_R=5$ V)	I_R	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	μA
Capacitance ($V_R=0$ V, $f=1$ MHz)	C_D	25	12	10	15	pF
Rise Time	t_r	120	300	300	450	ns
Fall Time	t_f	50	150	150	200	ns

Luminous Intensity (mcd)

Part Number	Min.	Max.	Test Condition	Part Number	Min.	Max.	Test Condition
LR 5480-CF	0.25	2	10 mA	LY 5480-GK	1.6	12.5	10 mA
LR 5480-D	0.4	0.8	10 mA	LY 5480-H	2.5	5.0	10 mA
LR 5480-DG	0.4	3.2	10 mA	LY 5480-J	4	8	10 mA
LR 5480-E	0.63	1.25	10 mA	LY 5480-JM	4	32	10 mA
LR 5480-F	1	2	10 mA	LY 5480-K	6.3	12.5	10 mA
LS 5480-GK	1.6	12.5	10 mA	LG 5480-GK	1.6	12.5	10 mA
LS 5480-J	4	8	10 mA	LG 5480-H	2.5	5	10 mA
LS 5480-JM	4	32	10 mA	LG 5480-J	4	8	10 mA
LS 5480-K	6.3	12.5	10 mA	LG 5480-JM	4	32	10 mA
LS 5480-L	10	20	10 mA	LG 5480-K	6.3	12.5	10 mA

See graph numbers 1, 2D, 3A, 5A, 6A, 7A, 8, 9, 10 on pages 42 - 48.