

SIEMENS

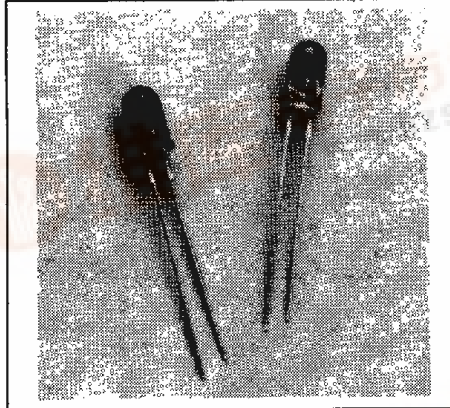
RED LR 5460 T-41-21

SUPER-RED LS 5460

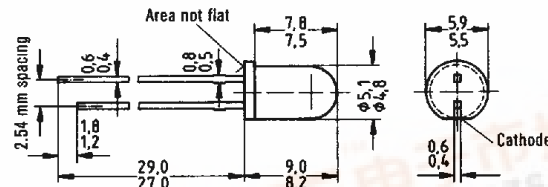
YELLOW LY 5460

GREEN LG 5460

T1³/₄ (5 mm) LED LAMP



Package Dimensions mm



Approx. weight 0,35 g

FEATURES

- High Light Output
- Diffused Lens
- Wide Viewing Angle 70°
- With Standoffs
- T1³/₄ (5 mm) Package Size
- 1" Lead Length
- I/C Compatible

DESCRIPTION

The LR 5460 series is a standard red gallium arsenide phosphide (GaAsP) LED lamp. The LS 5460 super-red and LY 5460 yellow are premium high efficiency light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LG 5460 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 5460 Red	LS 5460 Super-Red	LY 5460 Yellow	LG 5460 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_V)	ϕ	50	50	50	50	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_0	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 5460-DG	0.4	3.2	10 mA	LY 5460-GK	1.6	12.5	10 mA
LR 5460-E	0.63	1.25	10 mA	LY 5460-H	2.5	5	10 mA
LR 5460-F	1	2	10 mA	LY 5460-J	4	8	10 mA
LR 5460-FJ	1	8	10 mA	LY 5460-JM	4	32	10 mA
LR 5460-G	1.6	3.2	10 mA	LY 5460-K	6.3	12.5	10 mA
LS 5460-HL	2.5	20	10 mA	LG 5460-GK	1.6	12.5	10 mA
LS 5460-J	4	8	10 mA	LG 5460-H	2.5	5	10 mA
LS 5460-K	6.3	12.5	10 mA	LG 5460-J	4	8	10 mA
LS 5460-KN	6.3	50	10 mA	LG 5460-JM	4	32	10 mA
LS 5460-L	10	20	10 mA	LG 5460-K	6.3	12.5	10 mA

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