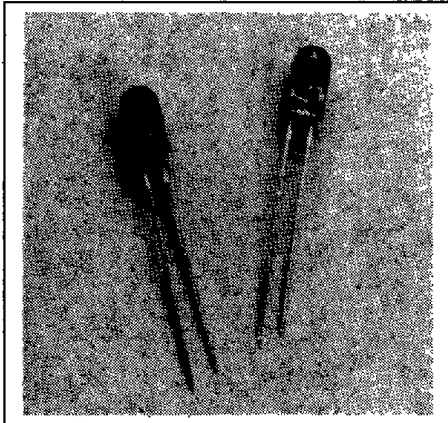


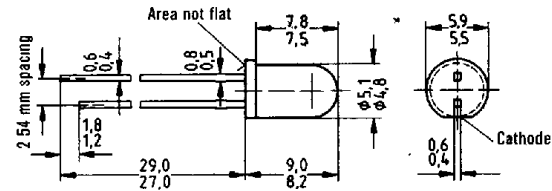
SIEMENS

T-41-21

RED LR 5420
SUPER-RED LS 5420
YELLOW LY 5420
GREEN LG 5410

T1³/₄ (5 mm) LED LAMP

Package Dimensions mm



Approx. weight 0.35 g

FEATURES

- High Light Output
- Water Clear Lens: Green
Lightly Tinted Clear Lens: Red, Super-Red, Yellow
- Viewing Angle, 24°
- T1³/₄ (5 mm) Package Size
- 1" Lead Length
- Front Panel Mounting
Snap-in Mounting Clips Available
Clip/Collar #Q62901-B65
#Q62901-B64
- I/C Compatible

DESCRIPTION

The LR 5420 is a standard red GaAsP light emitting diode lamp. The LS 5420 super-red and LY 5420-yellow lamps are fabricated with TSN (transparent substrate nitrogen) technology. The LG 5410 is a gallium phosphide LED lamp. All four have a lightly tinted clear lens with a narrow viewing angle for the concentration of intense brightness in a head-on position. This is particularly desirable for legend back lighting applications.

Maximum Ratings

Reverse Voltage (V_R)	5 V
Forward Current (I_F)	45 mA
Surge Current ($t = 10 \mu s$) (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/Air (R_{THA})	200 K/W

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

Parameter	Symbol	LR 5420 Red	LS 5420 Super-Red	LY 5420 Yellow	LG 5410 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	24	24	24	24	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 5420-EH	0.63	5	10 mA	LY 5420-LP	10	80	10 mA
LR 5420-G	1.6	3.2	10 mA	LY 5420-N	25	50	10 mA
LR 5420-GK	1.6	12.5	10 mA	LY 5420-NR	25	200	10 mA
LR 5420-H	2.5	5	10 mA	LY 5420-P	40	80	10 mA
LS 5420-LP	10	80	10 mA	LY 5420-Q	63	125	10 mA
LS 5420-N	25	50	10 mA	LG 5410-MQ	16	125	10 mA
LS 5420-NR	25	200	10 mA	LG 5410-P	40	80	10 mA
LS 5420-P	40	80	10 mA	LG 5410-PS	40	320	10 mA
LS 5420-Q	63	125	10 mA	LG 5410-Q	63	125	10 mA
				LG 5410-R	100	200	10 mA

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