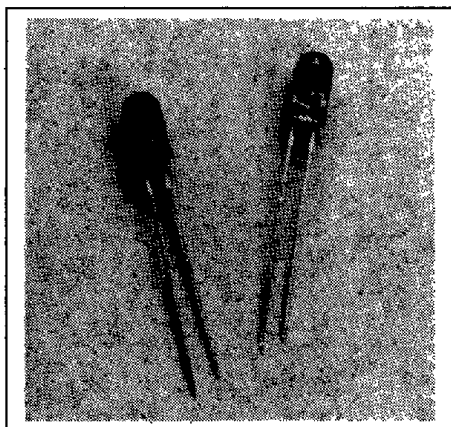
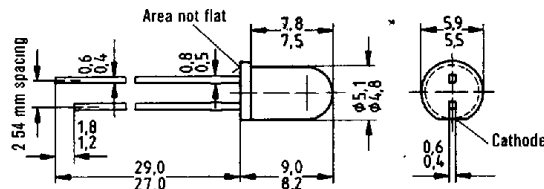


**SIEMENS**

T-41-21

**RED LR 5420****SUPER-RED LS 5420****YELLOW LY 5420****GREEN LG 5410****T1<sup>3</sup>/<sub>4</sub> (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°
- T1<sup>3</sup>/<sub>4</sub> (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	$\lambda_{PEAK}$	660	635	586	565	nm
Dominant Wavelength	$\lambda_{DOM}$	645	628	590	567	nm
Viewing Angle (Limits for 50% of Luminous Intensity $I_V$ )	$\phi$	24	24	24	24	Deg.
Forward Voltage ( $I_F = 10 \text{ mA}$ )	$V_F$	1.6 ( $\leq 2.0$ )	2.0 ( $\leq 2.6$ )	2.0 ( $\leq 2.6$ )	2.0 ( $\leq 2.6$ )	V
Reverse Current ( $V_R = 5 \text{ V}$ )	$I_R$	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	$\mu A$
Capacitance ( $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$ )	$C_0$	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