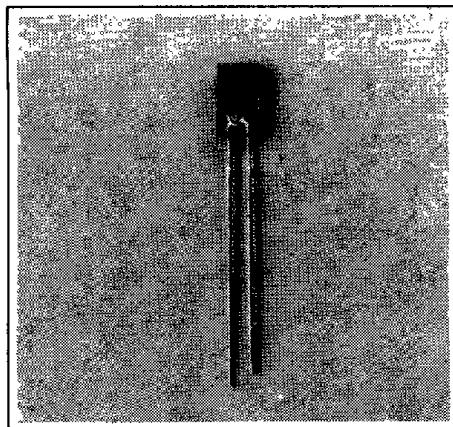


**SIEMENS****RED LR B480**

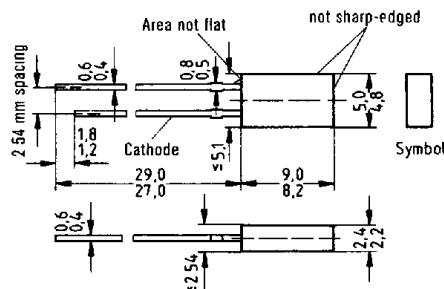
T-41-23

**SUPER-RED LS B480****YELLOW LY B480****GREEN LG B480****RECTANGULAR LED LAMP****FEATURES**

- Red Partly Diffused Lens, LR B480 and LS B480
- Yellow Partly Diffused Lens, LY B480
- Green Partly Diffused Lens, LG B480
- T1½ (5 mm) Size Rectangular Shape
- Minimum Lead Length 1"
- 1/16" Lead Spacing
- I/C Compatible

**DESCRIPTION**

The LR B480 is a standard red GaAsP LED lamp. The LS B480 super-red and LY B480 yellow are light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LG B480 green is a gallium phosphide LED lamp. All these lamps have a diffused lens which forms an evenly dispersed rectangular head-on light. They can be used singly as indicators or stacked together to form arrays.

**Package Dimensions mm**

Approx weight 0.25 g

**Maximum Ratings**

Reverse Voltage ( $V_R$ )	.....	.....	.....	.....	.....	.....	5 V
Forward Current ( $I_F$ )	.....	.....	.....	.....	.....	.....	.45 mA
Surge Current ( $I \leq 10 \mu s$ ) ( $I_{FS}$ )	.....	.....	.....	.....	.....	.....	1 A
Storage Temperature ( $T_{STO}$ )	.....	.....	.....	.....	.....	.....	-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 ( $R_{THJA}$ )	.....	.....	.....	.....	.....	.....	500 KW

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

Parameter	Symbol	LR B480 Red	LS B480 Super-Red	LY B480 Yellow	LG B480 Green	Unit
Wavelength of Emitted Light	$\lambda_{PEAK}$	660	635	586	565	nm
Dominant Wavelength	$\lambda_{DOM}$	645	628	590	567	nm
Viewing Angle (Limits for 50% of Luminous Intensity $I_V$ , shielded against lateral emission of light)	$\phi$	100	100	100	100	Deg
Forward Voltage ( $I_F=20$ 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 ( $V_R=5$ V)	$I_R$	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	$\mu A$
Capacitance ( $V_R=0$ V)	$C_0$	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	Test Condition			Part Number	Test Condition		
	Min.	Max.	Condition		Min.	Max.	Condition
LR B480-BD	0.16	0.8	10 mA	LY B480-GK	1.6	12.5	10 mA
LR B480-C	0.25	0.5	10 mA	LY B480-H	2.5	5.0	10 mA
LS B480-EH	0.63	0.5	10 mA	LG B480-EH	0.63	5	10 mA
LS B480-G	1.6	3.2	10 mA	LG B480-F	1	2	10 mA
LS B480-GK	1.6	12.5	10 mA	LG B480-G	1.6	3.2	10 mA
LS B480-H	2.5	5	10 mA	LG B480-GK	1.6	12.5	10 mA
LY B480-EH	0.63	5	10 mA	LG B480-H	2.5	5.0	10 mA
LY B480-F	1	2	10 mA				
LY B480-G	1.6	3.2	10 mA				

See graph numbers 1, 2G, 3A, 4A (yellow & green only), 5A, 6A, 7A, 8, 9, 10  
on pages 42 - 48.