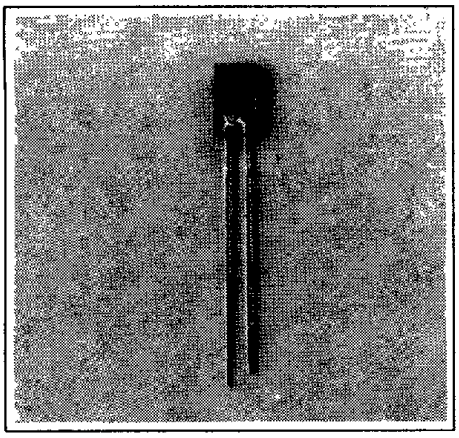
SIEMENS

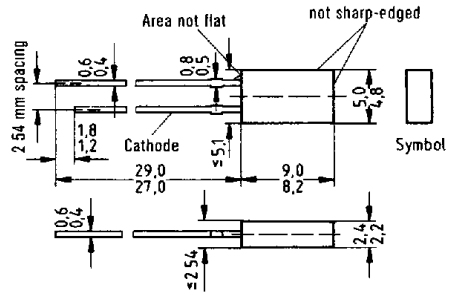
T-41-23

RED LR B480
SUPER-RED LS B480
YELLOW LY B480
GREEN LG B480

RECTANGULAR LED LAMP



Package Dimensions mm



Approx. weight 0.25 g

FEATURES

- **Red Partly Diffused Lens, LR B480 and LS B480**
  Yellow Partly Diffused Lens, LY B480
  Green Partly Diffused Lens, LG B480
- **T1¾ (5 mm) Size Rectangular Shape**
- **Minimum Lead Length 1″**
- **1/10″ 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. The can be used singly as indicators or stacked together to form arrays.

Maximum Ratings

Reverse Voltage (V_R) . . . . . 5 V
Forward Current (I_F) . . . . . 45 mA
Surge Current (t ≤ 10 µs) (I_{FS}) . . . . . 1 A
Storage Temperature (T_{STG}) . . . . . -55°C to +100°C
Junction Temperature (T_J) . . . . . 100°C
Total Power Dissipation (P_{TOT}) T_A=25°C . . . . . 150 mW
Thermal Resistance: Junction/Air ($R_{TH\,JA}$) . . . . . 500 K/W

Characteristics (T_A=25°C)

Parameter	Symbol	LR B480 Red	LS B480 Super-Red	LY B480 Yellow	LG B480 Green	Unit
Wavelength of Emitted Light	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, shielded against lateral emission of light)	φ	100	100	100	100	Deg
Forward Voltage (I_F=20 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)	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 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.