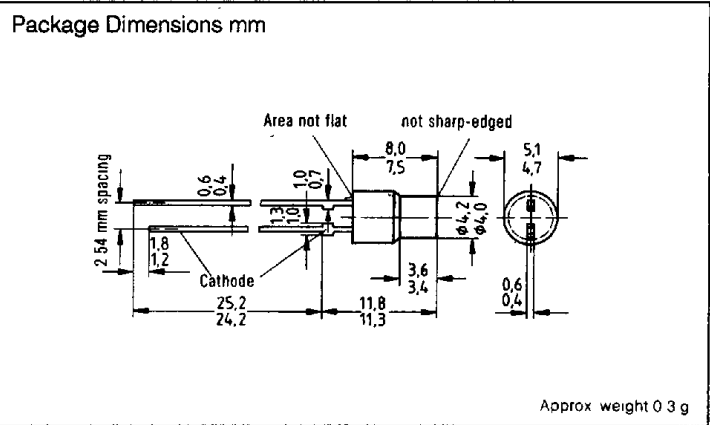
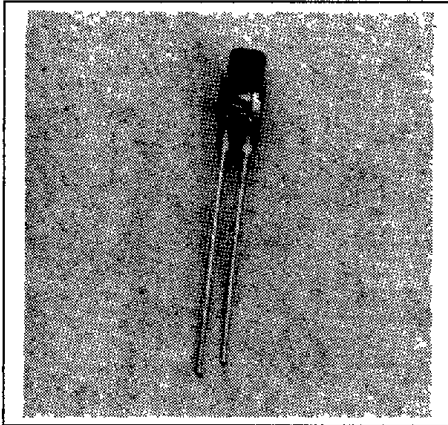


**SIEMENS**

T-41-23

**RED LR H380  
SUPER-RED LS H380  
YELLOW LY H380  
GREEN LG H380**

**CYLINDRICAL LED LAMP**



**FEATURES**

- Red Partly Diffused Lens, LR H380 and LS H380
- Yellow Partly Diffused Lens, LY H380
- Green Partly Diffused Lens, LG H380
- Cylindrical Shape
- Minimum Lead Length 1"
- 1/10" Lead Spacing
- I/C Compatible

**DESCRIPTION**

The LR H380 is a standard red GaAsP LED lamp. The LS H380 and LY H380 are light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LG H380 is a gallium phosphate LED lamp. All the series have a diffused lens which forms an evenly dispersed circular head-on light.

**Maximum Ratings**

Reverse Voltage ( $V_R$ )	.....	0.5 V
Forward Current ( $I_F$ )	.....	45 mA
Surge Current ( $t \leq 10 \mu s$ ) ( $I_{RM}$ )	.....	1 A
Storage Temperature ( $T_{STO}$ )	.....	-55°C to +100°C
Junction Temperature ( $T_J$ )	.....	100°C
Power Dissipation ( $P_{TOT}$ ) $T_A=25^\circ C$	.....	150 mW
Thermal Resistance Junction to Air ( $R_{THUA}$ )	.....	500 K/W

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

Parameter	Symbol	LR H380 Red	LS H380 Super-Red	LY H380 Yellow	LG H380 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 ( $I_F=10 \text{ mA}$ )	$V_F$	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 ( $V_R=0 \text{ V}$ )	$C_o$	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 H380-BD	0.16	0.8	10 mA	LY H380-EH	0.63	5	10 mA
LR H380-C	0.25	0.5	10 mA	LY H380-F	1	2	10 mA
LR H380-D	0.4	0.8	10 mA	LY H380-G	1.6	3.2	10 mA
LS H380-EH	0.63	0.5	10 mA	LY H380-GK	1.6	12.5	10 mA
LS H380-G	1.6	3.2	10 mA	LY H380-H	2.5	5	10 mA
LS H380-GK	1.6	12.5	10 mA	LG H380-EH	0.63	5	10 mA
LS H380-H	2.5	5	10 mA	LG H380-F	1	2	10 mA
LS H380-J	4	8	10 mA	LG H380-G	1.6	3.2	10 mA
				LG H380-GK	1.6	12.5	10 mA
				LG H380-H	2.5	5.0	10 mA

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