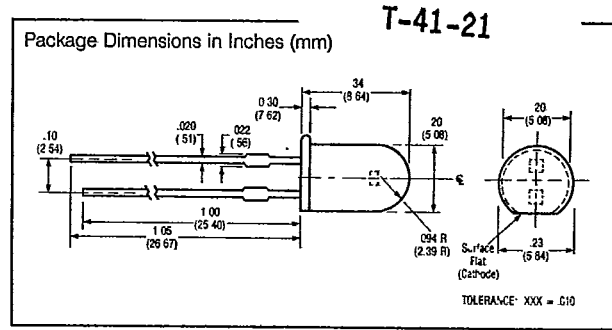
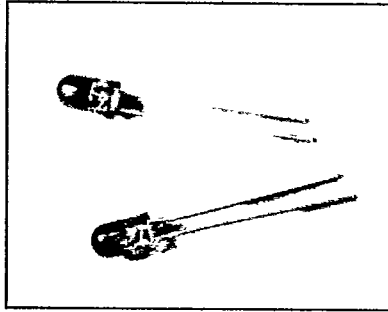


SIEMENS

HIGH EFFICIENCY RED LS5469-EO/-FO YELLOW LY5469-EO/-FO GREEN LG5469-EO/-FO LOW CURRENT T1¾ LED LAMP



FEATURES

- Low Power Requirement
- 50° Viewing Angle
- Diffused Lens
- 1" Lead Length
- I/C Compatible

DESCRIPTION

The 5469 series are low current LED lamps that have been designed to optimize light output at very low currents. These parts are ideally suited for applications where power is at a premium, such as portable equipment.

Both the HER and yellow lamps utilize GaAsP on GaP semiconductor materials while the green lamps utilize GaP on GaP.

See graph numbers 2K, 3F and 4C (HER), 3G and 4D (yellow), 3H and 4E (green), 6F on pages 4-27 - 4-34.

Maximum Ratings

Reverse Voltage (V_R)	.....	5 V
Forward Current (I_F)	.....	7.5 mA
Surge Current (I_{FS}) ($t \leq 10 \mu s / D \leq .005$)	.....	100 mA
Storage Temperature Range (T_{stg})	.....	-55 to +100°C
Junction Temperature (T_J)	.....	100°C
Total Power Dissipation ($T_{amb} = 25^\circ C$) (P_{tot})	.....	20 mW
Thermal Resistance Junction-air (R_{thJA})	.....	500 K/W

Electrical/Optical Characteristics ($T_{amb} = 25^\circ C$)

	Min	Typ	Max	Unit	Test Condition
Luminous Intensity					
HER, Yellow, Grn (-EO)	0.63	2		mcd	$I_F = 2 \text{ mA}$
HER, Yellow, Grn (-FO)	1	2		mcd	$I_F = 2 \text{ mA}$
Peak Wavelength					
HER		635		nm	$I_F = 2 \text{ mA}$
Yellow		590		nm	$I_F = 2 \text{ mA}$
Green		565		nm	$I_F = 2 \text{ mA}$
Dominant Wavelength					
HER		625		nm	$I_F = 2 \text{ mA}$
Yellow		592		nm	$I_F = 2 \text{ mA}$
Green		564		nm	$I_F = 2 \text{ mA}$
Half Angle		50		Deg.	
Forward Voltage V_F					
HER		1.8	2.5	V	$I_F = 2 \text{ mA}$
Yellow, Green		1.9	2.7	V	$I_F = 2 \text{ mA}$
Reverse Current I_R		010	10	μA	$V_R = 5 \text{ V}$
Response Time					
(Rise Time) t_r					
I_F from 10% to 90%		200		ns	$I_F = 25 \text{ mA}$
HER, Yellow					$T = 1 \mu sec$
Green		450		ns	$I_F = 25 \text{ mA}$
					$T = 1 \mu sec$
(Fall Time) t_f					
I_F from 90% to 10%		150		ns	$I_F = 25 \text{ mA}$
HER, Yellow					$T = 1 \mu sec$
Green		200		ns	$I_F = 25 \text{ mA}$
					$T = 1 \mu sec$
Capacitance C_0					
HER, Yellow		3		pF	$V_R = 0 \text{ V}$
Green		12		pF	$f = 1 \text{ MHz}$
					$V_R = 0 \text{ V}$
					$f = 1 \text{ MHz}$
Spectral Line Halfwidth					
HER		45		nm	$I_F = 2 \text{ mA}$
Yellow		50		nm	$I_F = 2 \text{ mA}$
Green		25		nm	$I_F = 2 \text{ mA}$