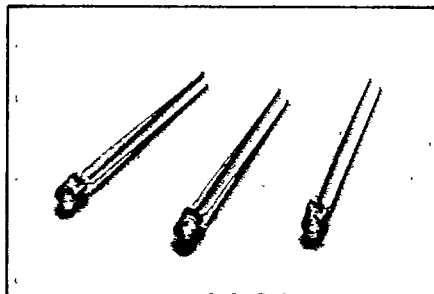


SIEMENS

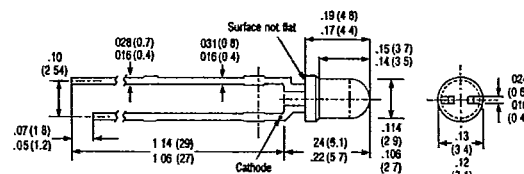
RED LDR 1101/1102/1103
 HIGH EFFICIENCY RED LDH 1111/1112/1113
 HIGH EFFICIENCY YELLOW LDY 1131/1132/1133
 HIGH EFFICIENCY GREEN LDG 1151/1152/1153

T1 LED LAMP

T-41-21



Package Dimension in Inches (mm)



LED Lamps

FEATURES

- High Light Output
- Diffused Lens
- Wide Viewing Angle 70°
- T 1 Size
- 1" Lead Length
- Front Panel Mounting
- Snap-In Mounting Clips Available
- Clip/Collar #2004-9016 Clear
- #2004-9015 Black
- I/C Compatible

DESCRIPTION

The LDR 110X Series is a standard red gallium arsenide phosphide (GaAsP) LED lamp. The LDH111X high efficiency red and LDY113X yellow are premium high efficiency light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LDG 115X green Series is a gallium phosphide (GaP) lamp. All have a diffused plastic lens which emits a full flooded intense light.

See graph numbers on pages 4-27 - 4-34.

Red: 1D, 2D, 3D, 5B, 6C, 7B, 8B, 9B, 10B

HER: 1A, 2E, 3A, 5A, 6A, 7A, 8A, 9A, 10A

Yellow: 1A, 2E, 3A, 5A, 6A, 7A, 8A, 9B, 10A

Green: 1A, 2F, 3B, 5A, 6A, 7C, 8A, 9A, 10A

Maximum Ratings

		LDR 110X	LDH 111X LDY 113X LDG 115X	
Reverse voltage	V_R	5	5	V
Forward current	I_F	100	60	mA
Surge current ($\leq 10\mu s$)	I_{FS}	2	1	A
Storage temperature range	T_{stg}	-55 to +100		°C
Junction temperature	T_j	100	100	°C
Total power dissipation ($T_{amb}=25^\circ C$)	P_{tot}	200	200	mW
Thermal resistance junction to air	R_{thJA}	375	375	K/W

Characteristics ($T_{amb}=25^\circ$)

		LDR 110X	LDH 111X	LDY 113X	LDG 115X	
Wave length at peak emission	λ_{peak}	665±15	645±15	590±10	560±15	nm
Dominant wave length	λ_{dom}	645	638	592	581	nm
Viewing angle	ϕ	70	70	70	70	Deg.
(Lum. is for 50% of luminous intensity I_v)						
Forward voltage ($I_F = 20mA$)	V_F	1.6 (≤2.0)		2.4 (≤3.0)		V
Reverse current ($V_R = 5V$)	I_R	5	100	0.01 (≤10)	50	μA
Rise time	t_r	5	100	200	50	ns
Fall time	t_f	5	100	200	50	ns
Capacitance ($V_R = 0V, f = 1MHz$)	C_0	40	12	10	45	pF

Luminous Intensity

P/N	mcd (MIN)	Test conditions
LDR 1101	10	20mA
LDR 1102	20	20mA
LDR 1103	40	20mA
LDH 1111	25	10mA
LDH 1112	40	10mA
LDH 1113	60	10mA
LDY 1131	10	10mA
LDY 1132	20	10mA
LDY 1133	40	10mA
LDG 1151	25	20mA
LDG 1152	60	20mA
LDG 1153	10	20mA