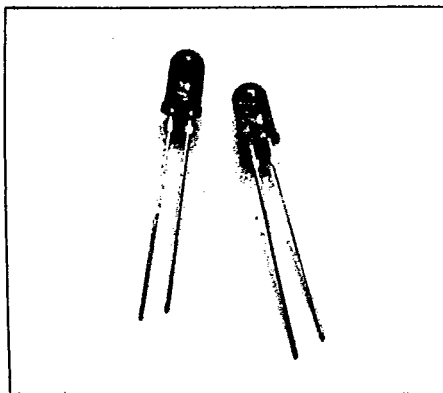


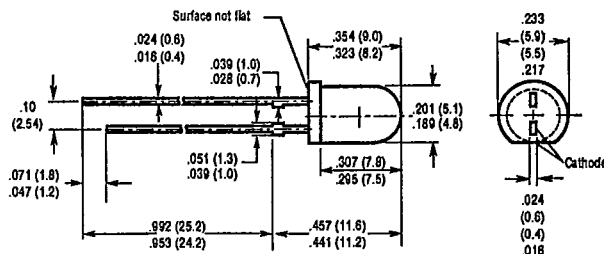
T-41-21

SIEMENS

RED LDR 5001/5002/5003
HIGH EFFICIENCY RED LDH 5021/5022/5023
HIGH EFFICIENCY YELLOW LDY 5061/5062
HIGH EFFICIENCY GREEN LDG 5071/5072
T1 1/4 LED LAMP



Package Dimensions in Inches (mm)



LED Lamps

FEATURES

- High Light Output
- Diffused Lens
- Wide Viewing Angle 70°
- With Standoffs
- T1 1/4 Package Size
- 1" Lead Length
- Front Panel Mounting
Snap-In Mounting Clips Available
Clip/Collar #2004-9002 Black
#2004-9003 Clear
- I/C Compatible

DESCRIPTION

The LDR 500X is a standard red gallium arsenide phosphide (GaAsP) LED lamp. The LDH 502X high efficiency red and LDY 506X yellow are premium high efficiency light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LDG 507X green 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, 2G, 3D, 5B, 6C, 7B, 8B, 9A, 10B
 HER: 1A, 2G, 3A, 5A, 6A, 7A, 8A, 9A, 10A
 Yellow: 1A, 2G, 3E, 5A, 6A, 7A, 8A, 9A, 10A
 Green: 1A, 2G, 3B, 5A, 6D, 7C, 8A, 9A, 10A

Maximum Ratings

	LDR 500X	LDH 502X	LDY 506X	LDG 507X
Reverse voltage	V_R	5	5	V
Forward current	I_F	100	60	mA
Surge current ($t \leq 10\mu s$)	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 ($T_{amb} = 25^\circ C$)

Characteristics (T _{amb} = 25°C)		LDR 500X	LDH 502X	LDY 506X	LDG 507X	
Wavelength at peak emission	λ _{peak}	665±15	645±15	590±10	560±15	nm
Dominant wavelength	λ _{dom}	645	638	592	561	nm
Half angle	ω	35	35	35	35	Deg.
(Limits 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 = 5 V)	I _R		0.01 (≤ 10)			μA
Rise time	t _r	5	100	200	50	ns
Fall time	t _f	5	100	200	50	ns
Capacitance (V _R = 0 V; f = 1MHz)	C ₀	40	12	10	45	pF

Luminous Intensity Grouping

P/N	mcd (Min)	Test conditions
LDR 5001	1.0	20mA
LDR 5002	2.5	20mA
LDR 5003	4.0	20mA
LDH 5021	2.0	10mA
LDH 5022	4.0	10mA
LDH 5023	6.0	10mA
LDY 5061	1.0	10mA
LDY 5062	2.5	10mA
LDG 5071	2.5	20mA
LDG 5072	6.0	20mA