

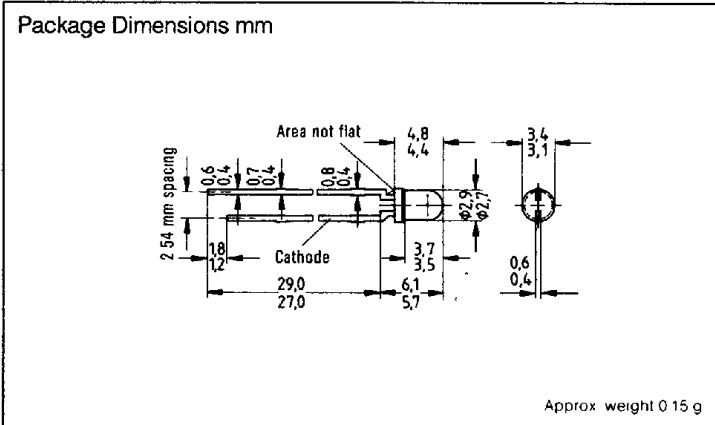
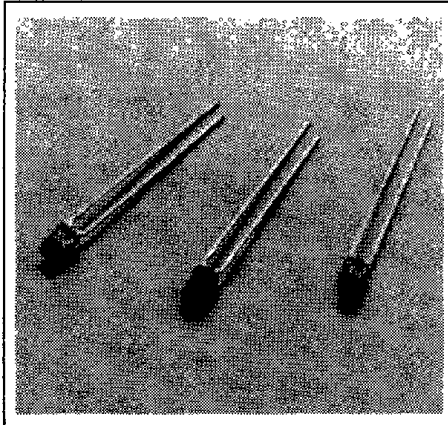
**SIEMENS**

**SUPER-RED LS 3340** T-41-21

**YELLOW LY 3340**

**GREEN LG 3330**

**T1 (3 mm) LED LAMP**



LED Lamps

**FEATURES**

- High Light Output
- Lens: Super-Red, Yellow – Tinted Clear  
Green – Colorless Clear
- Viewing Angle 50°
- T1 (3 mm) Package Size
- 1" Lead Length
- I/C Compatible

**DESCRIPTION**

The LS 3340 super-red series and the LY 3340 yellow are premium high efficiency light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LG 3330 green series is a gallium phosphide (GaP) lamp. All have a diffused plastic lens which emits a full flooded intense light.

**Maximum Ratings**

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

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

Parameter	Symbol	LS 3340 Super-Red	LY 3340 Yellow	LG 3330 Green	Unit
Wavelength at Peak					
Emission	$\lambda_{PEAK}$	635	586	565	nm
Dominant Wavelength	$\lambda_{DOM}$	628	590	567	nm
Viewing Angle (Limits for 50% of Luminous Intensity $I_v$ )	$\phi$	50	50	50	Deg.
Forward Voltage ( $I_F = 10$ mA)	$V_F$	2.0 ( $\leq 2.6$ )	2.0 ( $\leq 2.6$ )	2.0 ( $\leq 2.6$ )	V
Reverse Current ( $V_R = 5$ V)	$I_R$	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	0.01 ( $\leq 10$ )	$\mu A$
Capacitance ( $V_R = 0$ V, $f = 1$ MHz)	$C_o$	12	10	15	pF
Rise Time	$t_r$	300	300	450	ns
Fall Time	$t_f$	150	150	200	ns

**Luminous Intensity (mcd)**

Part Number	Min.	Max.	Test		Part Number	Min.	Max.	Test	
			Condition	Condition					
LS 3340-JM	4	32	10 mA		LG 3330-KN	6.3	50	10 mA	
LS 3340-L	10	20	10 mA		LG 3330-L	10	20	10 mA	
LS 3340-LP	10	80	10 mA		LG 3330-LP	10	80	10 mA	
LS 3340-M	16	32	10 mA		LG 3330-M	16	32	10 mA	
LY 3340-HL	2.5	20	10 mA		LG 3330-N	25	50	10 mA	
LY 3340-K	6.3	12.5	10 mA						
LY 3340-KN	6.3	50	10 mA						
LY 3340-L	10	20	10 mA						
LY 3340-M	16	32	10 mA						

See graph numbers 1, 2A, 3A, 5A, 6A, 7A, 8, 9, 10 on pages 42 – 48.