

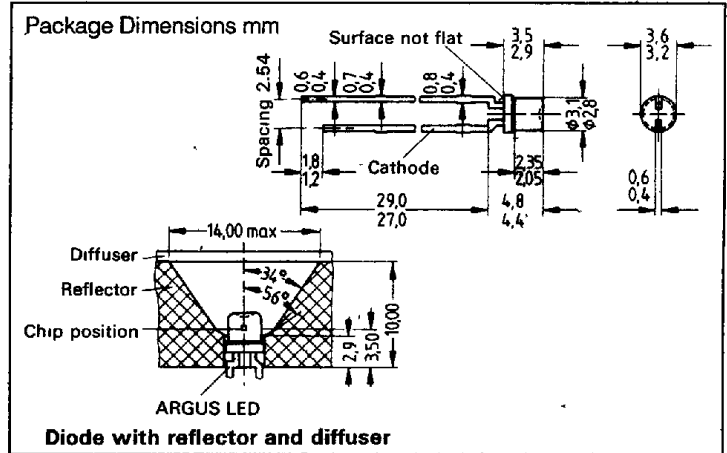
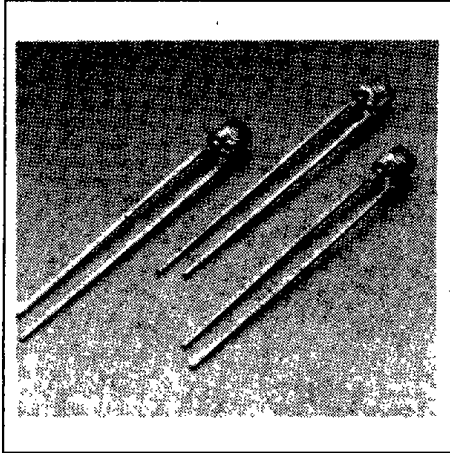


SIEMENS

SUPER-RED LS K380-LO
YELLOW LY K380-LO
GREEN LG K380-LO

T1 (3 mm) ARGUS LED LAMP

T-41-23



FEATURES

- Colors: Super-Red, Yellow, Green
- Lens: Tinted Transparent
- Low Power Dissipation
- Low Self-Heating
- Rugged Design
- Optimal for Backlighting Applications
- Cathode: Shorter Solder Tab

DESCRIPTION

The LS/LY/LG K380-LO are T1 (3 mm) ARGUS LED lamps. ARGUS lamps can be used only with an additional, custom-built reflector (i.e., white plastic, such as Pocan B7375). The front end of the reflector is covered by a diffuser (see package dimensions). Uniform illumination can be enhanced by the reflector design tailored to the LED and/or by the use of appropriate diffuser material. If the diffuser is tinted, the spectral transmission must be adjusted to the wavelength emitted by the LED.

Applications include backlighting of display panels, e.g. front panels, graphic control and display boards, sealed keyboards, large-scale displays, dot matrix displays.

Maximum Ratings

Reverse Voltage (V_R) 5 V
Forward Current (I_F) 45 mA
Surge Current (I_{SM}) $t_p = 10 \mu s$ 1 A
Operating Temperature Range (T_A) -55°C to +100°C
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/Air ($R_{TH(A)}$) 500 K/W

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

Parameter	Symbol	LS K380-LO	LY K380-LO	LG K380-LO	Unit
		Super-Red	Yellow	Green	
Wavelength at Peak Emission ($I_F = 20 \text{ mA}$)	λ_{PEAK}	635 (typ.)	586 (typ.)	565 (typ.)	nm
Dominant Wavelength	λ_{DOM}	628	590	567	nm
Spectral Bandwidth at 50% ϕ_v ($I_F = 20 \text{ mA}$)	$\Delta\lambda$	45	45	25	nm
Forward Voltage ($I_F = 10 \text{ mA}$)	V_F	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	V
Reverse Current ($V_R = 5 \text{ V}$)	I_R	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	μA
Capacitance ($V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$)	C_0	12	10	15	pF
Switching Times ($I_F = 100 \text{ mA}$, $t_p = 10 \mu s$)					
Rise Time from 10% to 90%	t_r	300	300	300	ns
Fall Time from 90% to 10%	t_f	150	150	450	ns
Luminous Flux ($I_F = 15 \text{ mA}$)	ϕ_v	32 (≥ 10)	32 (≥ 10)	32 (≥ 10)	mlm

* Luminous flux factor of ϕ_v in one packaging unit $\frac{\phi_{v \text{ MAX}}}{\phi_{v \text{ MIN}}} \leq 2$

See graph numbers 1, 2N, 3A, 5A, 6A, 7A, 8, 10, 11A, 12 on pages 42 - 48.