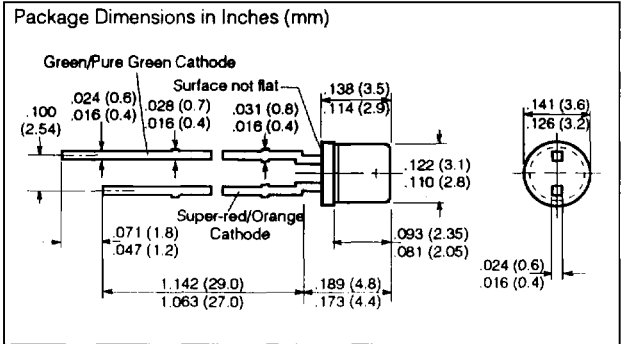


SIEMENS

SUPER-RED/GREEN LSG K370-LO SUPER-RED/PURE GREEN LSP K370-KO ORANGE/PURE GREEN LOP K370-KO

Two-Color, T1 (3 mm) ARGUS LED Lamp



FEATURES

- Clear Colorless Lens
- High Luminous Flux
- Rugged Design
- Applications—Backlighting Display Panels
 - Front Panels
 - Graphic Control and Display Boards
 - Sealed Keyboards

DESCRIPTION

The LSG K370 is a T1 (3mm) two leaded bicolor (super-red/green) ARGUS LED lamp with their chips in an anti-parallel arrangement. The LSP K370 is a super-red/pure green ARGUS LED and the LOP K370 is an orange/pure green unit.

ARGUS lamps are used 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 illuminations can be enhanced by the reflector design tailored to the LED and/or by using appropriate diffuser material.

Note: Siemens does not supply the reflector or diffuser.

Maximum Ratings

Operating Temperature Range (T_{OP})	.....	-55°C to +100°C
Storage Temperature Range (T_{STG})	.....	-55°C to +100°C
Junction Temperature (T_J)	.....	+100°C
Forward Current (I_F)	.....	40 mA
Surge Current (I_{FM}), $t \leq 10 \mu s$	.....	0.5 A
Power Dissipation (P_{TOT}), $T_A=25^\circ C$	.....	140 mW
Thermal Resistance Junction to Air (R_{THJA})	.....	400 K/W

Characteristics ($T_A=25^\circ C$) All values typical unless otherwise noted

Parameter	Symbol	Super-			Pure	Unit
		Red	Orange	Green	Green	
Peak Wavelength ($I_F=20 \text{ mA}$)	λ_{PEAK}	635	610	565	557	nm
Dominant Wavelength ($I_F=20 \text{ mA}$)	λ_{DOM}	628	605	570	560	nm
Spectral Bandwidth 50% I_V ($I_F=20 \text{ mA}$)	$\Delta\lambda$	45	40	25	22	nm
Forward Voltage ($I_F=10 \text{ mA}$)	V_F	2.0	2.0	2.0	2.0	V
Capacitance ($V_R=0 \text{ V}$, $f=1 \text{ MHz}$)	C_0	(≤ 2.6)	(≤ 2.6)	(≤ 2.6)	(≤ 2.6)	V
Switching Times ($I_F=100 \text{ mA}$, $t_P=10 \mu s$, $R_L=50 \Omega$)						
Rise Time, 10% to 90%	t_R	300	300	450	450	ns
Fall Time, 90% to 10%	t_F	150	150	200	200	ns
Luminous Flux(¹) ($I_F=15 \text{ mA}$)	Φ_V	32	20	32	20	mIm
	Φ_V	(≥ 10)	(≥ 6.3)	(≥ 10)	(≥ 6.3)	mIm

Notes:

1. Luminous flux ratio in one packaging unit $\Phi_V \text{ max}/\Phi_V \text{ min.} \leq 2$.
Luminous flux ratio in one LED unit $\Phi_V \text{ max}/\Phi_V \text{ min.} \leq 4$. (LSP...)
Luminous flux ratio in one LED unit $\Phi_V \text{ max}/\Phi_V \text{ min.} \leq 3$. (LSG...)
2. The brightness of the darker chip in one package determines the brightness group of the LED.

See graph numbers 1, 2W, 3A, 4H, 5A, 6A, 7A, 8A, 9A, 10D in the back of this section.