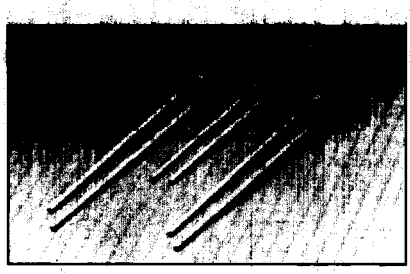
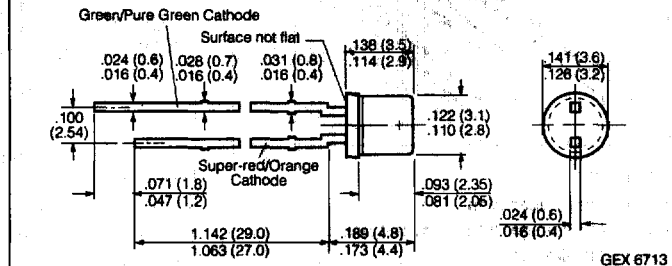
SIEMENS

SUPER-RED/GREEN LSG K370
SUPER-RED/PURE GREEN LSP K370
ORANGE/PURE GREEN LOP K370
ORANGE/GREEN LOG K370
T1 (3 mm) Multi ARGUS® LED Lamp



Dimensions in inches (mm)



LED Lamps

FEATURES

- **Colorless, clear package and lens**
- **Antiparallel chip**
- **High signal efficiency by changing LED color**
- **With custom built reflector suitable for backlighting display panels**
- **For optical coupling into light pipes**
- **Uniform illumination of diffuser screen in front of custom built reflector**
- **Both colors can be controlled separately**
- **Solder leads with stand-off**
- **Available taped on reel**
- **Lead dump resistant per DIN 40839**

Maximum Ratings refer to the specified chip regardless of the other one's operating status.

Operating/Storage Temperature Range (T_{OP}; T_{STG}) ..... −55°C to +100°C
Junction Temperature (T_J) ..... 100°C
Forward Current (I_F)
LS, LO, LG ..... 40 mA
LP ..... 30 mA
Surge Current (I_{FM}) t ≤10 µS ..... 0.5 A
Power Dissipation (P_{TOT}) T_A≤25°C
LS, LO, LG ..... 140 mW
LP ..... 100 mW
Thermal Resistance,
Junction/Air (R_{THJA}) ..... 400 K/W

DESCRIPTION

ARGUS LED lamp chips are arranged in antiparallel.

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.

Characteristics T_A=25°C, all values typical unless otherwise noted

Parameter	Sym.	Super-Red	Orange	Green	Pure Green	Unit	Condition
Peak Wavelength	λ_{PEAK}	635	610	565	557	nm	I_F=20 mA
Dominant Wavelength	λ_{DOM}	628	605	570	560		
Spectral Bandwidth, 50% I_V	$\Delta\lambda$	45	40	25	22		
Forward Voltage	V_F	2.0(≤2.6)				V	I_F=10 mA
Capacitance	C_0	12	8	8	15	pF	V_R=0 V, f=1 MHz
Switching Time Rise Time, 10% to 90%	t_R	300	300	450	450	ns	I_F=100 mA, t_P=10 µs, R_L=50 Ω
Fall Time, 90% to 10%	t_F	150	150	200	200		

Luminous Flux [1, 2, 3], Φ_v, mlm

Part No.	Min–Max	Part No.	Min–Max	Condition
LSG, LOG K370-LP	10–80	LSP, LOP K370-KN	6.3–50	I_F=15 mA
LSG, LOG K370-N	25–50	LSP, LOP K370-M	16–32	
LSG, LOG K370-P	40–80	LSP, LOP K370-N	25–50	
LSG, LOG, K370-NR	25–200	LSP, LOP K370-MQ	16–125	
		LSP K370-P	40–80	

Notes:

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

See graph numbers OHL01698, OHL01685, OHL02145, OHL02253, OHL01162, OHL01686, OHL01170, OHL02104, OHL02105, OHL02149, OHL02107 beginning on page 4–92.