# SIEMENS

# SUPER-RED/GREEN LSG K372-QO SUPER-RED/PURE GREEN LSP K372-PO High Current T1 (3 mm) Super ARGUS MULTILED Lamp



#### **FEATURES**

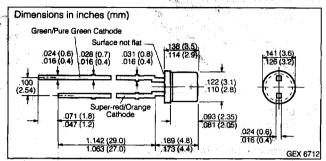
- · Coloriess, clear lens
- · Plastic package with a special design
- · Anti-parallel chip
- Appropriate for high ambient light because of high operating current (typ. 50 mA)
- High signal efficency possible by changing LED color
- Suitable for backlighting of display penels with custom built reflector
- · For optical coupling into light pipes
- Uniform illumination of a diffuser screen in front of a custom built reflector
- Solder leads with stand-off
- · Available taped on reel
- Load dump resistant per DIN 40839

## DESCRIPTION

Super ARGUS LED lamp chip are arranged antiparallel. Super ARGUS LEDs are designed to operate at 50 mA and provide as much as 10X luminous flux as standard ARGUS LEDs.

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**

Refer to the specified chip regardless of the other one's status.

Operating/Storage Temperature Range (TOP TSTG)	55°C to +100°C
Junction Temperature (T <sub>J</sub> )	100°C
Forward Current (I <sub>F</sub> )	
Surge Current (I <sub>FM</sub> ) t ≤10 μs, D=0.005	
Power Dissipation (P <sub>TOT</sub> ) T <sub>A</sub> ≤25°C	240 mW
Thermal Resistance, Junction to Air (RTHJA)	

Note 1. Mounted on PC board up to stand off pad size ≥16 mm2

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

Parameter	Sym.		LS	LG	LP	l	Jnit	Condition
Peak Wavelength	λ <sub>PEAK</sub> λ <sub>DOM</sub>		635	565	557	nm	l <sub>F</sub> =20 mA	
Dominant Wavelength			628	570	560			
Spectral Bandwidth 50% I <sub>V</sub>	Δλ		45	25	22			
Forward Voltage	VF	-	2.0 (≤3.8)	2.6 (≤3.8)		1	1	I <sub>F</sub> =50 mA
Capacitance	Co		. 55		80	рF		V <sub>R</sub> =0 V, f=1 MHz
Switching Times, ly 10% to 90% 90% to 10%	t <sub>R</sub>		300 150	450 200			is is	l <sub>F</sub> =100 mA, t <sub>P</sub> =10 μs, R <sub>L</sub> =50 Ω
Part Number Luminous Flux, Φ <sub>V</sub> , mlm						Condition		
LSG K372-QO	7.	160 (≥100)				I <sub>F</sub> =50 mA		
LSP K372-PO		100	(≥40)					

#### Notes:

- 1. Total capacitance results from the sum of the capacitances.
- 2. Luminous flux ratio in one packaging unit Φ<sub>VMAX</sub> /Φ<sub>VMIN</sub> ≤2<sup>(4)</sup>.
- 3. Luminous flux ratio of one LED ΦI<sub>VMAX</sub>/I<sub>VMIN</sub> ≤3.0 (LSG K372), ≤4.0 (LSP K372).
- In MULTILEDs, the brightness of the darker chip in one package determines the brightness group of the LED.

See graph numbers OHL01698, OHL01712, OHL01626, OHL01628, OHL01710, OHL02068, OHL02104, OHL02105, OHL01696, OHL01700 beginning on page 4–92.