multicomp

SPC-F005.DWG

REVISIONS

DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

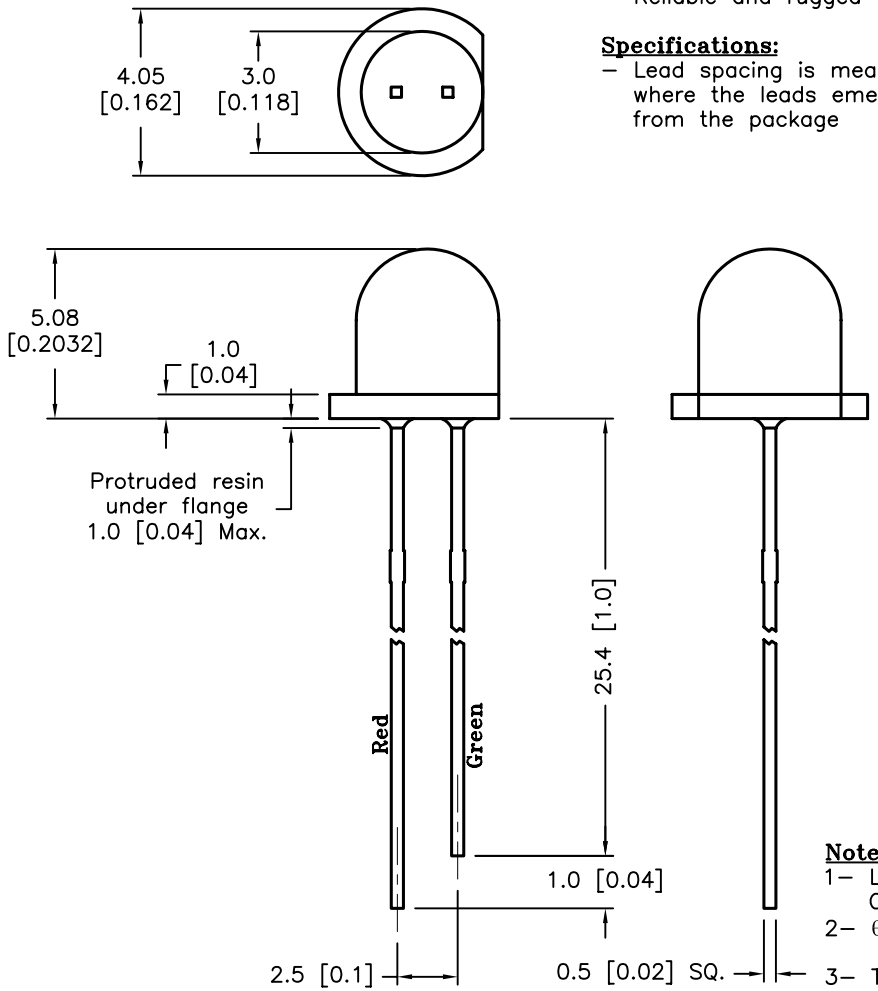
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1908	A	RELEASED	EO	6/7/06	YA	6/19/06	HO	6/19/06

RoHS Compliant

Features:
- High intensity
- Standard T-1 diameter package
- General purpose LED
- Reliable and rugged

Specifications:
- Lead spacing is measured where the leads emerge from the package

Source Color	Chip Material	Lens Color
Red	GaAsP	White Diffused
Yellow		



Absolute Maximum Rating at Ta=25°C

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature [4mm (0.157) From Body]	260°C for 5 seconds	

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Colour	Typ.	Max	Unit	Test Condition
Luminous Intensity	I_v	Red	30	---	mcd	I_f=20mA (Note 1)
		Yellow	30	---		
Viewing Angle	$2\theta_{1/2}$	---	60	---	Deg	(Note 2)
Dominant Wavelength	λd	Red	640	648	nm	I_f=20mA (Note 3)
		Yellow	585	590		
Spectral Line Half-Width	$\Delta\lambda$	---	20	25	nm	I_f=20mA
Forward Voltage	V_f	Red	1.8	2.4	V	I_f=20mA
		Yellow	1.9	2.5		
Reverse Current	I_R	---	---	100	μA	V_R=5V

Notes:
1- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2- $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
3- The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED,
±0.25 [±0.010]

DRAWN BY:	DATE:
EKLAS ODISH	6/7/06
CHECKED BY:	DATE:
YILMAZ AKYONDEM	6/19/06
APPROVED BY:	DATE:
HISHAM ODISH	6/19/06

DRAWING TITLE:
Bi-color LED, Round Lens, 3mm (T1), Red/Yellow

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC20394	87K7031.DWG	A

SCALE: NTS | U.O.M.: mm [INCHES] | SHEET: 1 OF 1