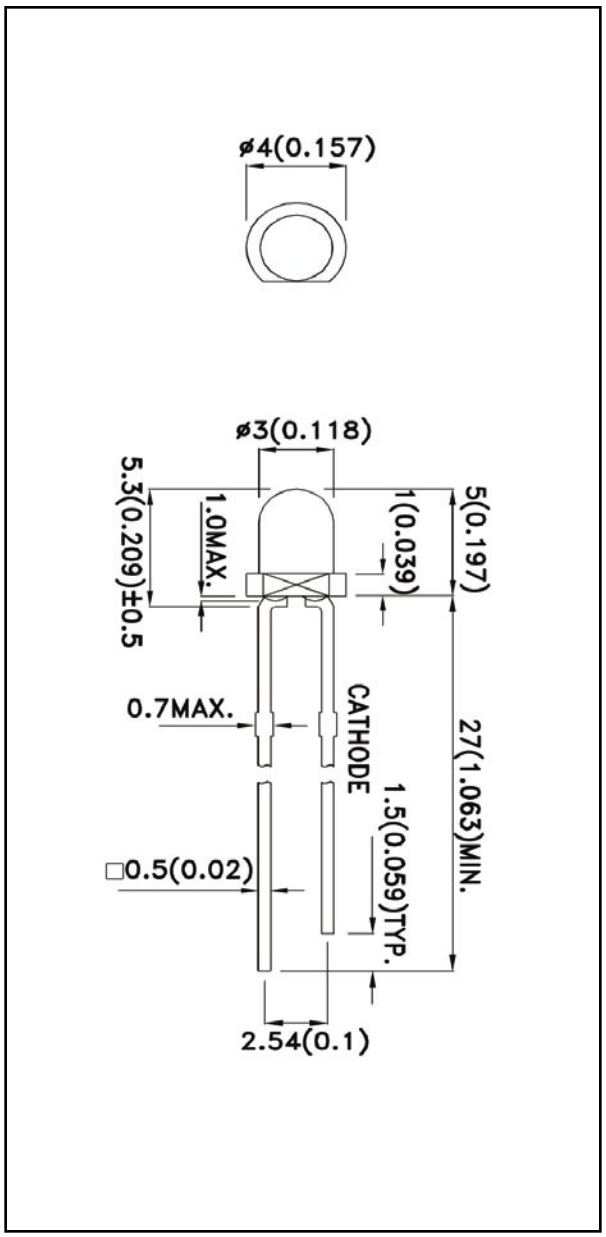


AND123R

Standard LED

T-1 Package (3 mm)

The bright red (GaP) source color devices are made with Gallium Phosphide Red Light Emitting Diode.

Features

- Low power consumption
- Popular T-1 diameter package
- General purpose leads
- Reliable and rugged
- Long life - solid state reliability
- Available on tape and rell
- RoHS compliant

Maximum Ratings (Ta - 25 ºC)

Color		Lens Desc.	Iv (mcd) [2] @ 10 mA		Viewing Angle 2θ1/2 (Deg)
LED	Lens		Min.	Typ.	
Red	Red	Red Transparent	1.8	5	50

Notes: 1) θ 1/2 is the angle from optical centering where the luminous intensity is 1/2 of the optical peak value.
2) luminous intensity / luminous flux: ± 15%

Absolute Maximum Ratings (Ta - 25 ºC)

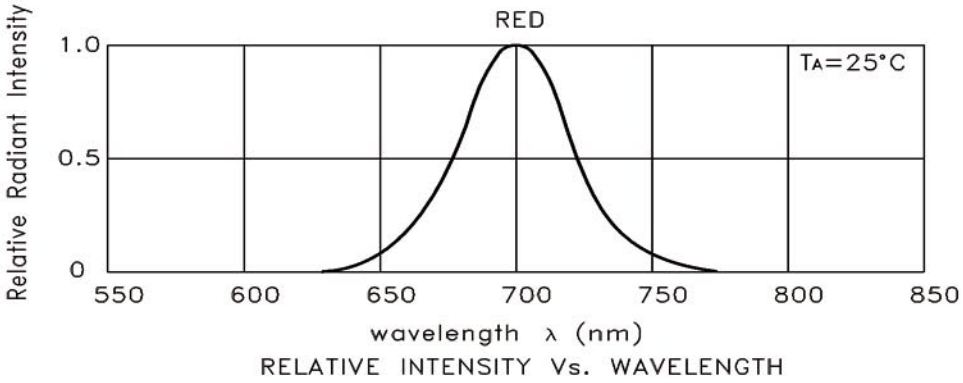
Item	Symbol	Rating	Unit
Power Dissipation	P_D	62.5	mW
DC Forward Current	I_F	25	mA
Reverse Voltage	V_R	5	V
Peak Forward Current [1]		130	mA
Operating Temperature Range	T_{OPR}	-40 to +85	ºC
Lead Solder Temperature [2]	260ºC for 3 seconds		
Lead Solder Temperature [3]	260ºC for 5 seconds		

Notes: 1) 1/10 Duty Cycle; 0.1 ms Pulse Width
2) 2 mm below package base
3) 5 mm below package base

Electrical/Optical Characteristics at Ta=25º C

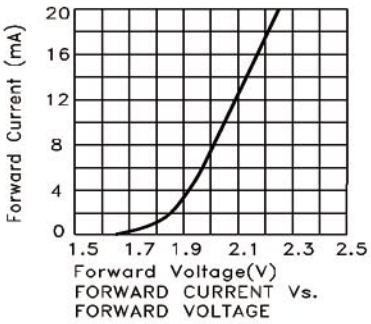
Item	Symbol	Test Condition	Device	Typical	Maxiumum	Unit
Peak Wavelength	λ_{peak}	I_F = 20 mA	Bright Red	700	–	nm
Dominant Wavelength	$\lambda_{D\ [1]}$	I_F = 20 mA	Bright Red	660	–	nm
Spectral Line Half Width	$\Delta\lambda$ 1/2	I_F = 20 mA	Bright Red	45	–	nm
Capacitance	C	VF = 0V; f=1MHz	Bright Red	40	–	pF
Forward Voltage	$V_{F\ [2]}$	I_F = 20 mA	Bright Red	2.25	2.5	V
Reverse Current	I_R	V_R = 5 V	Bright Red	–	10	μA

Notes: 1) Wavelength ± 1 nm 2) Forward voltage ± 0.1V

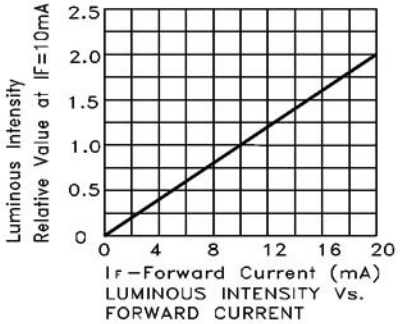


RELATIVE INTENSITY Vs. WAVELENGTH

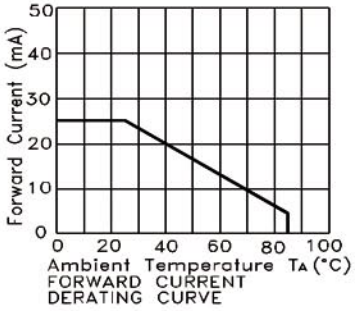
Bright Red



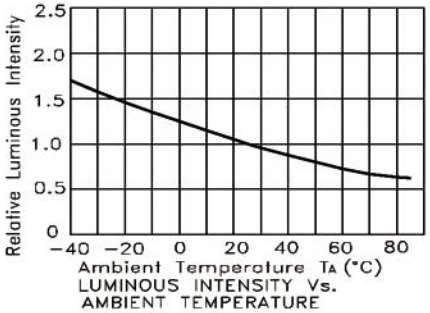
FORWARD CURRENT Vs.
FORWARD VOLTAGE



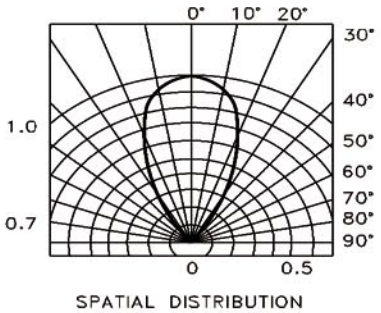
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION