

PC120TR4

Hi-Eff Red

T1 (3mm) Right-Angle 0.20" Centerline PCB LEDs
50° viewing angle

DWG BY:
BL / GP
09-11-07

R&D:
BJ
08-19-13

QA:
RD
08-20-13

REVISION LTR: A
ECR#: 071713-RTD01
08-15-13

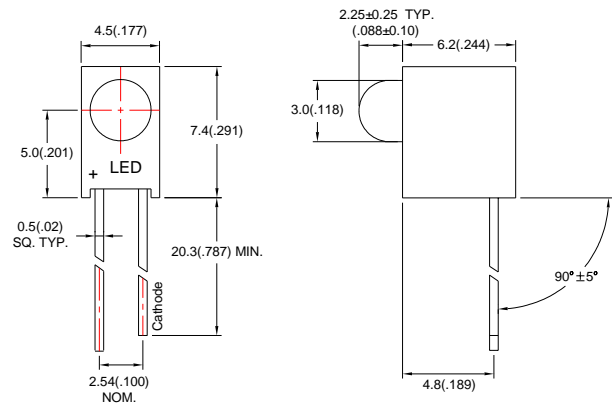
● **Features:**

1. Chip material: GaAsP/GaP
2. Emitted color : Hi-Eff Red
3. Lens Appearance : Red Diffused
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 3mm diameter package.
9. This product is RoHS compliant.

● **Applications:**

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● **Package dimensions**



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (0.01") unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

● **Absolute maximum ratings(Ta=25°C)**

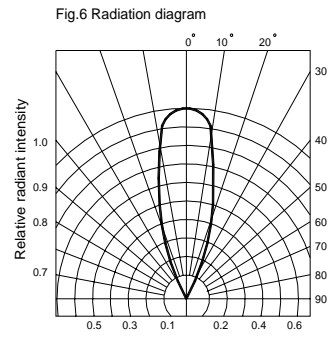
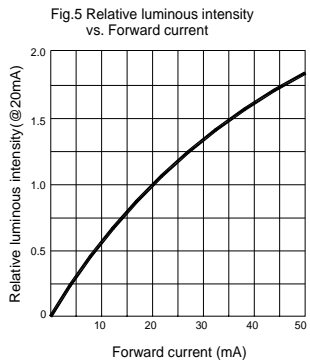
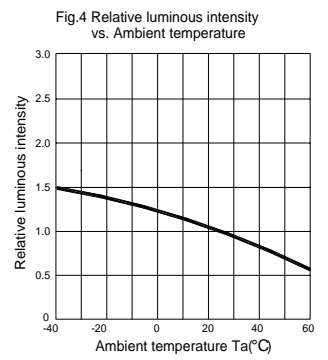
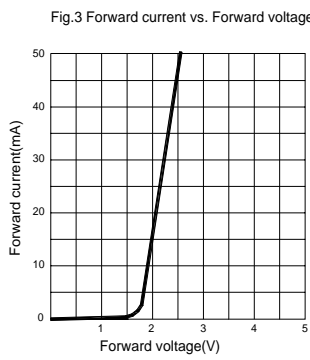
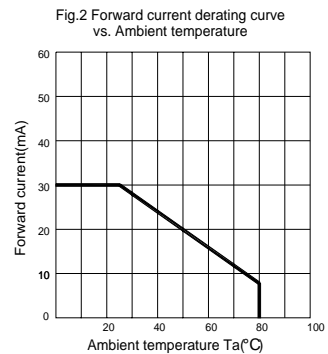
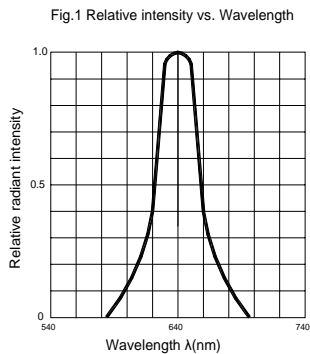
Parameter	Symbol	Rating	Unit
Power Dissipation	P _d	80	mW
Forward Current	I _F	30	mA
Peak Forward Current* ¹	I _{FP}	150	mA
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-40°C~85°C	
Storage Temperature	T _{stg}	-40°C~100°C	
Soldering Temperature	T _{sol}	260°C max (for 5 seconds)	
Hand Soldering Temperature	T _{sol}	350°C max (for 3 seconds)	

*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

● **Electrical and optical characteristics(Ta=25°C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20mA$	-	2.0	2.6	V
Luminous Intensity	I_v	$I_F=20mA$	-	75	-	mcd
Reverse Current	I_R	$V_R=5V$	-	-	100	μA
Peak Wave Length	λ_p	$I_F=20mA$	-	640	-	nm
Dominant Wave Length	λ_d	$I_F=20mA$	-	626	-	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	42	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	50	-	deg
Radiant Intensity		$I_F=20mA$	-	-	-	mW/sr
Chromaticity Coordinates	X	$I_F=20mA$	-	0.70	-	
	Y		-	0.29	-	

● **Typical electro-optical characteristics curves**



● **Bin Limits**

1. Intensity Bin Limits (At $I_F=20\text{mA}$)

Bin Code	Min. (mcd)	Max. (mcd)
M	28	42
N	42	63
P	63	94
Q	94	140
R	140	210

● Bin :



NOTES: 1. Tolerance of measurement of luminous intensity. : $\pm 15\%$

● **DIP soldering (Wave Soldering)**

Preheating : 120°C , within 120~180 sec.
 Operation heating : $255^\circ\text{C} \pm 5^\circ\text{C}$ within 5 sec. 260°C (Max)
 Gradual Cooling (Avoid quenching).

