



LEDTRONICS[®]
America's Premium Brand LED Company™

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21PCT120T4-0021 (21PCT120T4-R/R)

Hi-Eff Red/Hi-Eff Red

3mm (T1) Right-Angled Bi-Level PCB LEDs
45° Viewing Angle



DWG BY:
GP
11-03-20

R&D:
UF
11-04-20

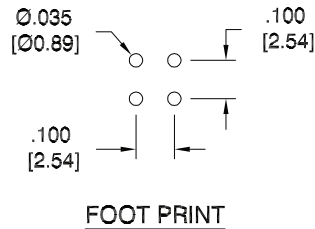
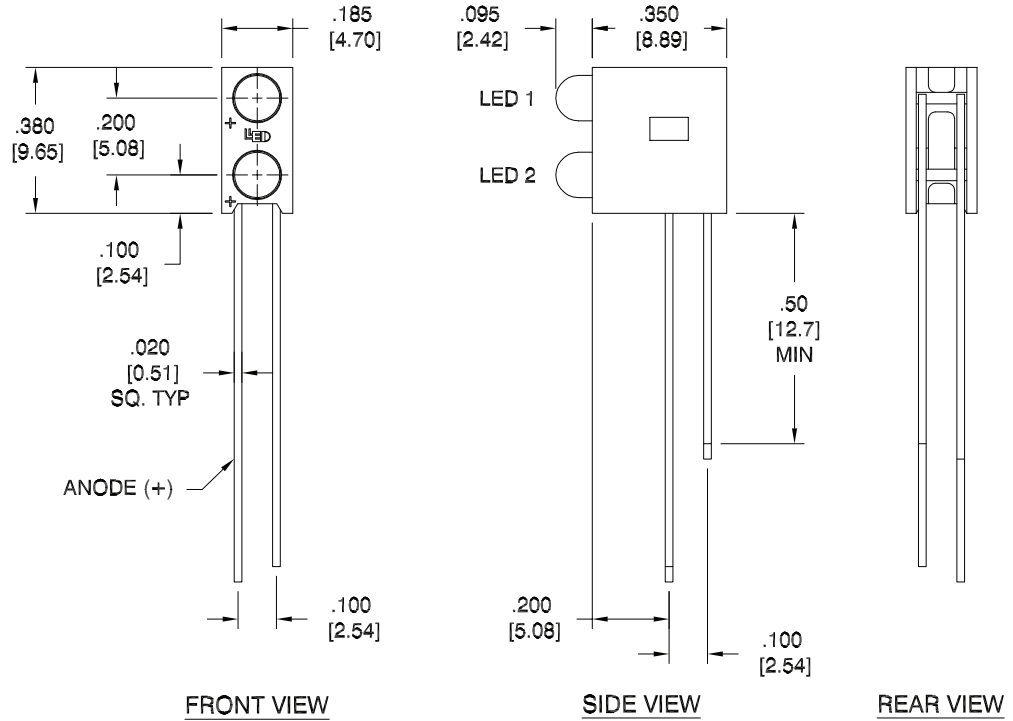
MFG:
LD
11-04-20

QA:
SB
11-04-20

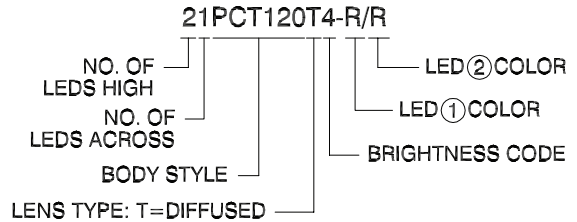
REVISION LTR: -

11-03-20

● **Dimensions**



TOLERANCE PER ANSI-Y14.5
(UNLESS OTHERWISE STATED)
.XXX ± .010
.XX ± .025
ANGLES ± 0°, 30'
FRACT. ± 1/32



NOTES:

1. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS].
2. BASE MATERIAL: NYLON 66 (UL94V-0)
3. BASE COLOR: BLACK

● **Absolute Maximum Ratings(Ta=25°C)**



Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I _F	30	mA
Peak Forward Current* ¹	I _{FP}	150	mA
Reverse Voltage	V _R	5	V
Operating Temperature	Topr	-40°C~+85°C	
Storage Temperature	Tstg	-40°C~+85°C	

*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	$I_F=20\text{mA}$	-	2.0	2.6	V
Luminous Intensity	I_v	$I_F=20\text{mA}$	-	37	-	mcd
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	μA
Peak Wave Length	λ_p	$I_F=20\text{mA}$	-	648	-	nm
Dominant Wave Length	λ_d	$I_F=20\text{mA}$	625	632	638	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	-	42	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	45	-	deg
Radiant Intensity		$I_F=20\text{mA}$	-	-	-	$\mu\text{W/sr}$
Chromaticity Coordinates	X	$I_F=20\text{mA}$	-	0.71	-	
	Y		-	0.29	-	

● **Typical electro-optical characteristics curves**

● **Features:**

1. Chip material: GaAsP/GaP
2. Emitted color: Hi-Eff Red
3. Lens Appearance: Red Diffused

Fig.1 Relative intensity vs. Wavelength

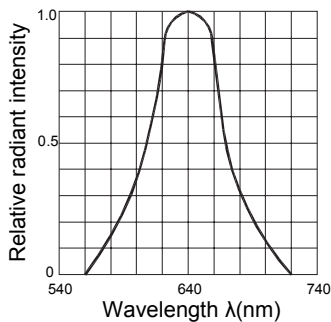


Fig.2 Forward current derating curve vs. Ambient temperature

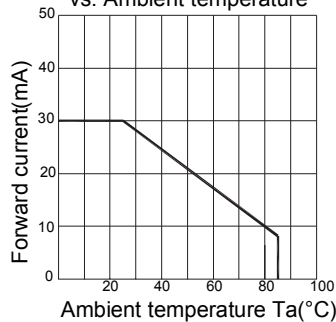


Fig.3 Forward current vs. Forward voltage

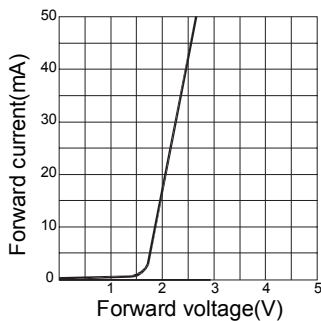


Fig.4 Relative luminous intensity vs. Ambient temperature

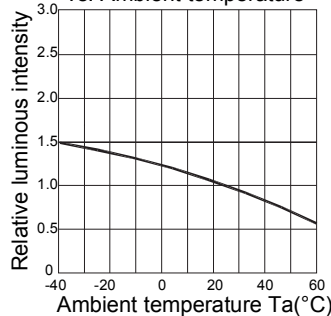


Fig.5 Relative luminous intensity vs. Forward current

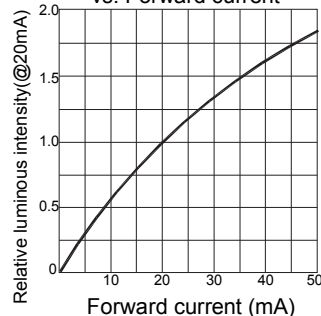
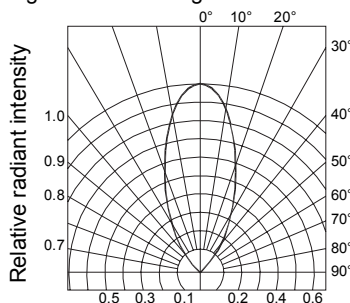
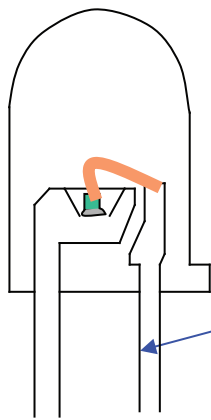


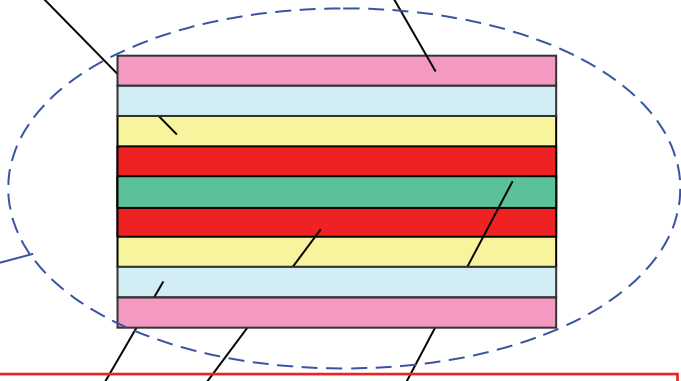
Fig.6 Radiation diagram





Lead Base Finish(plating) Material : (Ni)

Lead Base Finish(plating) Material : (Sn)



Lead Base Plating(if exists) : (Cu)

Lead Frame Material : (Fe)

Lead Finish(plating) Material: (Ag)