

# RL290R4-HT

## Hi-Eff Red

5.0 x2.0mm, Rectangle Body, 7.5mm Height  
130° viewing angle

DWG BY:  
BL / GP  
01-09-07

CHK BY:  
PL  
09-11-07

QA:  
\_\_\_\_\_  
\_\_-\_\_-\_\_

MFG:  
\_\_\_\_\_  
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REVISION LTR: -

09-11-07

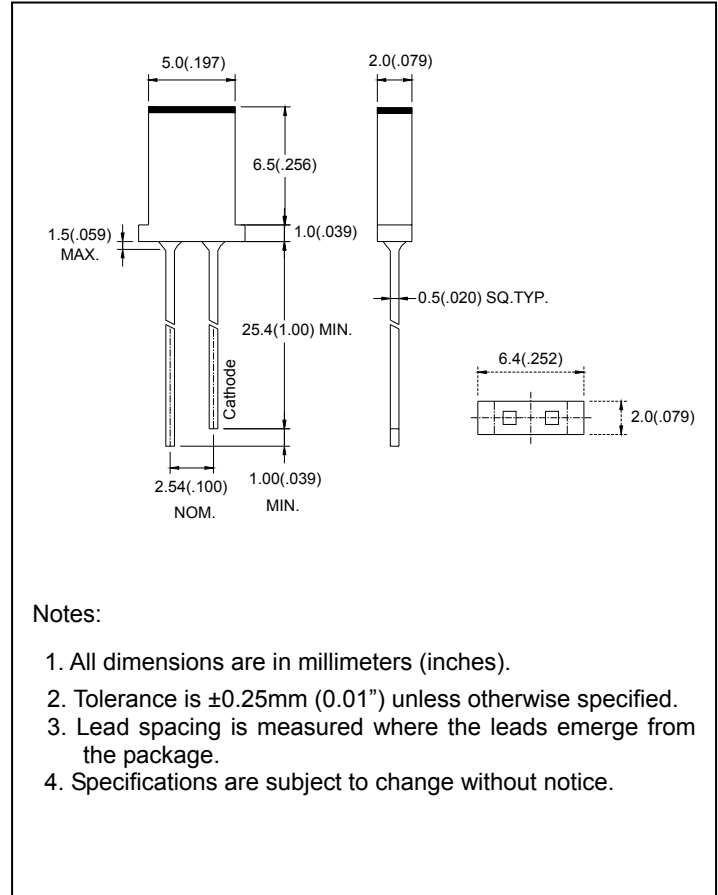
● **Features:**

1. Chip material: GaAsP/GaP
2. Emitted color : Hi-Eff Red
3. Lens Appearance : Red Diffused
4. Low power consumption.
5. Most suitable for use like level indicator.
6. Excellent uniformity of light emittance.
7. Long life solid state reliability.
8. Compatible.
9. This product is RoHS compliant.

● **Applications:**

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

● **Package dimensions**



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

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I <sub>F</sub>	30	mA
Peak Forward Current* <sup>1</sup>	I <sub>FP</sub>	150	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	Topr	-40°C~80°C	
Storage Temperature	Tstg	-40°C~85°C	
Soldering Temperature	Tsol	260°C (for 5 seconds)	

\*<sup>1</sup>Condition for I<sub>FP</sub> 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 <sub>F</sub>	I <sub>F</sub> =20mA	-	2.0	2.6	V
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> =20mA	-	8	-	mcd
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	100	μA
Peak Wave Length	λ <sub>p</sub>	I <sub>F</sub> =20mA	638	643	649	nm
Dominant Wave Length	λ <sub>d</sub>	I <sub>F</sub> =20mA	624	629	633	nm
Spectral Line Half-width	Δλ	I <sub>F</sub> =20mA	-	42	-	nm
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	-	130	-	deg
Radiant Intensity		I <sub>F</sub> =20mA	-	-	-	mW/sr
Chromaticity Coordinates	X	I <sub>F</sub> =20mA	-	0.71	-	
	Y		-	0.29	-	

● **Typical electro-optical characteristics curves**

Fig.1 Relative intensity vs. Wavelength

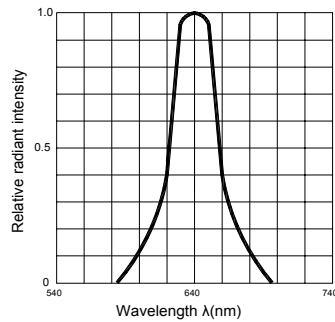


Fig.2 Forward current derating curve vs. Ambient temperature

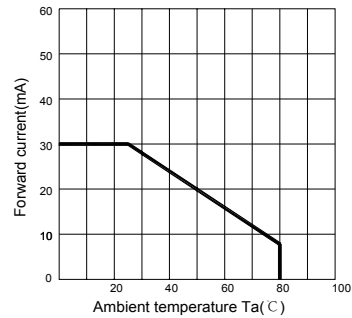


Fig.3 Forward current vs. Forward voltage

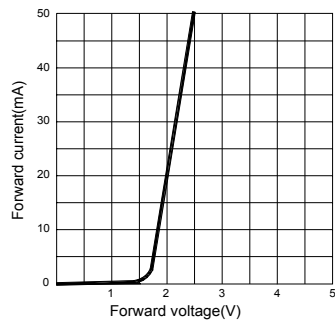


Fig.4 Relative luminous intensity vs. Ambient temperature

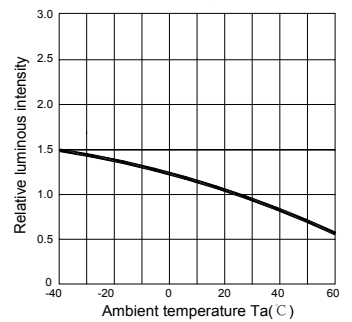


Fig.5 Relative luminous intensity vs. Forward current

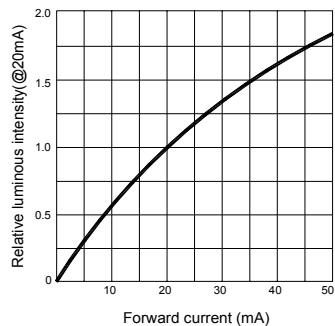


Fig.6 Radiation diagram

