

RL280TUB500-3.8VF

Super Blue

5 x2mm, Rectangle Body, 7mm Height
125° viewing angle

DWG BY:
BL / GP
07-18-08

CHK BY:
PL
07-18-08

QA:

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MFG:

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REVISION LTR: -

07-18-08

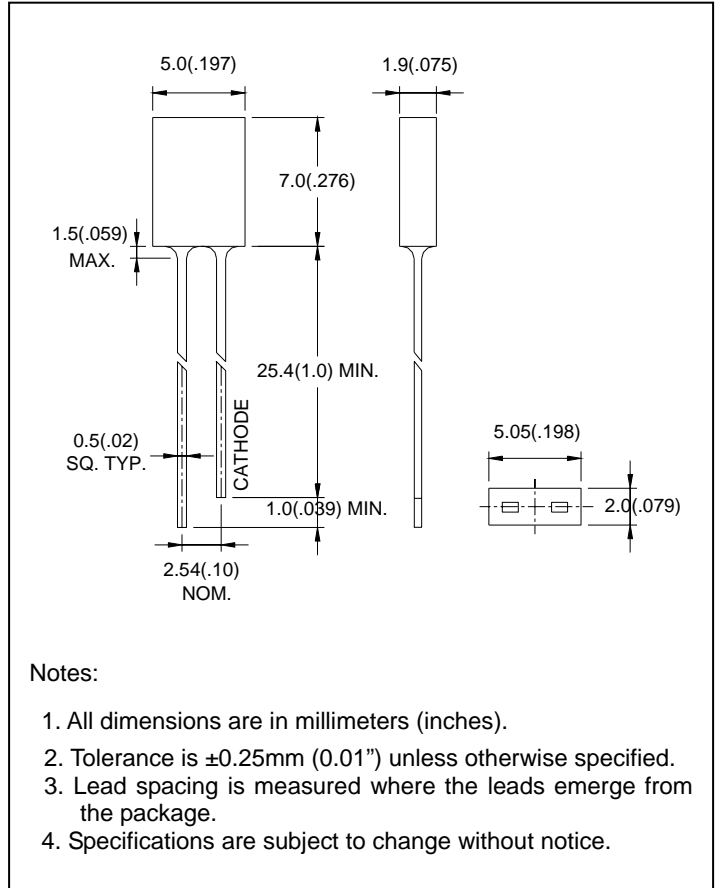
● **Features:**

1. Chip material: GaN/SiC
2. Emitted color : Super Blue
3. Lens Appearance : Blue 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	120	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 ~80°C	
Storage Temperature	Tstg	-40°C ~85°C	
Soldering Temperature	Tsol	260°C (for 5 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	$I_F=20mA$	-	3.8	5.0	V
Luminous Intensity	I_v	$I_F=20mA$	-	7	-	mcd
Reverse Current	I_R	$V_R=5V$	-	-	100	μA
Peak Wave Length	λ_p	$I_F=20mA$	-	428	-	nm
Dominant Wave Length	λ_d	$I_F=20mA$	-	465	-	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	64	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	125	-	deg
Radiant Intensity		$I_F=20mA$	-	-	-	mW/sr
Chromaticity Coordinates	X	$I_F=20mA$	-	0.15	-	
	Y		-	0.06	-	

● **Typical electro-optical characteristics curves**

Fig.1 Relative intensity vs. Wavelength

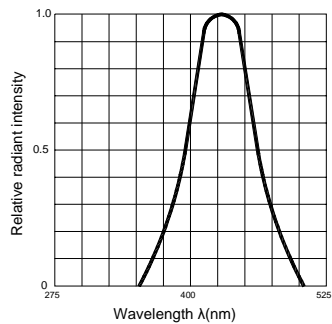


Fig.2 Forward current derating curve vs. Ambient temperature

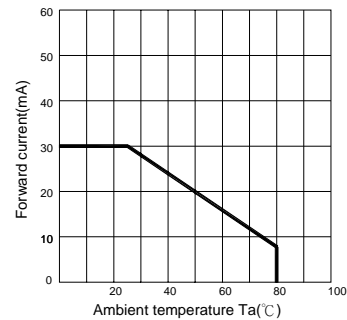


Fig.3 Forward current vs. Forward voltage

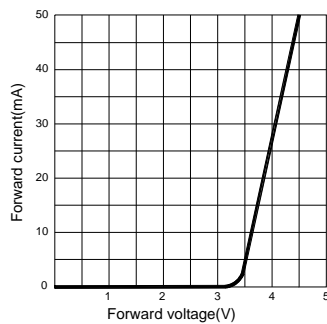


Fig.4 Relative luminous intensity vs. Ambient temperature

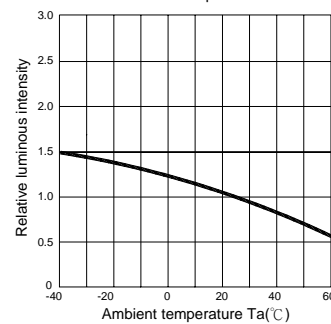


Fig.5 Relative luminous intensity vs. Forward current

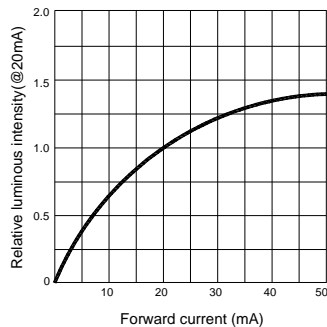
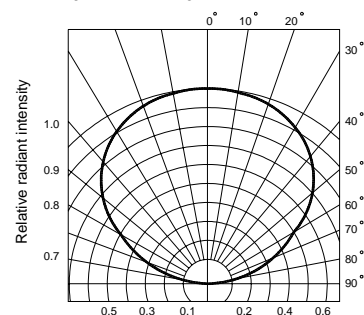


Fig.6 Radiation diagram



● **Bin Limits**

1. Intensity bin limits (At $I_F=20\text{mA}$)

Bin Code	Min. (mcd)	Max. (mcd)
:	:	:
K	11	21
L	16	32
M	24	48
N	37	72
P	55	110
:	:	:

2. Color Bin Limits (At $I_F=20\text{mA}$) : Dominant Wave Length $\lambda_d(\text{nm})$

Bin Code	Min. (nm)	Max. (nm)
3	459	466
4	464	471
5	469	476

● Bin :

