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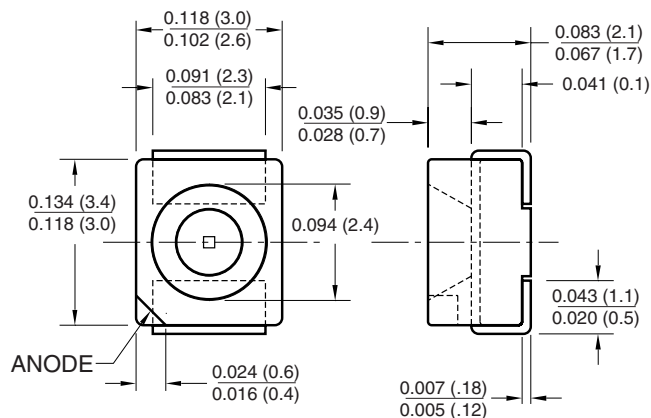
For any questions, you can email us directly:

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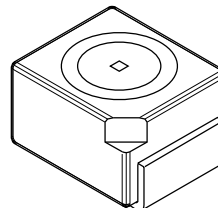
SURFACE MOUNT INFRARED LIGHT EMITTING DIODE

PACKAGE DIMENSIONS



NOTES:

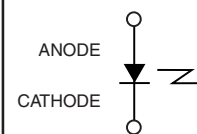
- Dimensions are in inches (mm)
- Tolerance of $\pm .010 (.25)$ on all non nominal dimensions unless otherwise specified.



FEATURES

- Wavelength = 880 nm, AlGaAs
- Wide Emission Angle, 120°
- Surface Mount PLCC-2 Package
- High Power

SCHEMATIC



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T _{opr}	-55 to +100	°C
Storage Temperature	T _{stg}	-55 to +100	°C
Soldering Temperature (Flow) ^(2,3)	T _{sol}	260 for 10 sec	°C
Continuous Forward Current	I _F	100	mA
Reverse Voltage	V _R	5	V
Peak Forward Current ⁽⁴⁾	I _{FM}	1.75	A
Power Dissipation ⁽¹⁾	P _D	180	mW

NOTES

- Derate power dissipation linearly 2.4 mW/°C above 25°C.
- RMA flux is recommended.
- Methanol or isopropyl alcohols are recommended as cleaning agents.
- Pulse conditions; tp = 100 μs, T = 10 ms.

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Peak Emission Wavelength	I _F = 100 mA	λ _P	—	880	—	nm
Spectral Bandwidth	I _F = 100 mA	Δλ	—	80	—	nm
Emission Angle	I _F = 100 mA	θ	—	120	—	Deg.
Forward Voltage	I _F = 100 mA, tp = 20 ms	V _F	—	1.5	1.8	V
	I _F = 1 A, tp = 100 μs		—	3.0	3.8	
Reverse Current	V _R = 5 V	I _R	—	—	1	μA
Radiant Intensity	I _F = 100 mA, tp = 20 ms	I _e	4	—	8	mW/sr
	I _F = 1 A, tp = 100 μs		—	48	—	
Radiant Flux	I _F = 100 mA, tp = 20 ms	φ _e	—	10	—	mW
Temp. Coeff. of I _E	I _F = 100 mA	T _{Cl}	—	-0.5	—	%/K
Temp. Coeff. of V _F	I _F = 100 mA	T _{CV}	—	-4	—	mV/K
Temp. Coeff. of λ	I _F = 100 mA	T _{Cλ}	—	0.25	—	nm/K
Rise Time	I _F = 100 mA	t _r	—	—	1	μs
Fall Time	I _F = 100 mA	t _f	—	—	1	μs

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TYPICAL PERFORMANCE CURVES

Fig. 1 Normalized Radiant Intensity vs. Forward Current

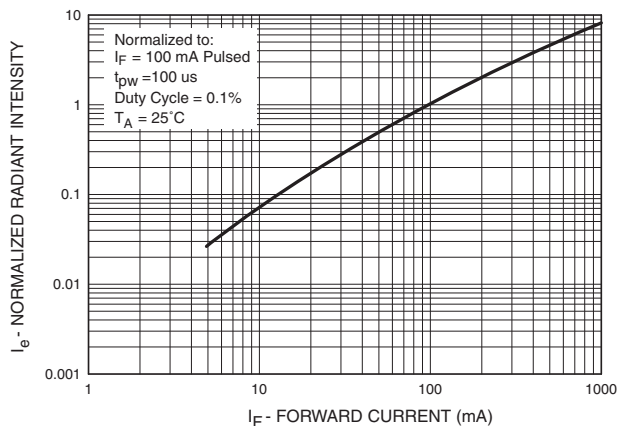


Fig. 2 Forward Current vs. Forward Voltage

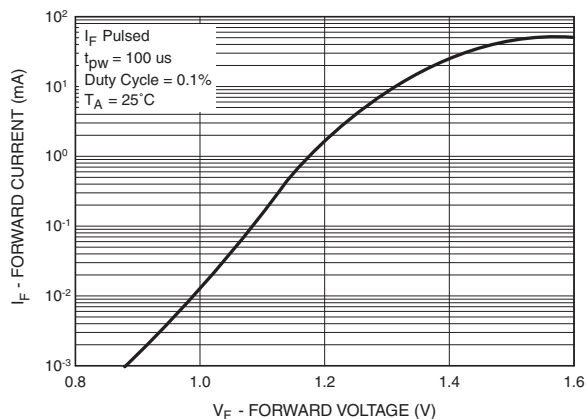


Fig. 4 Forward Voltage vs. Ambient Temperature

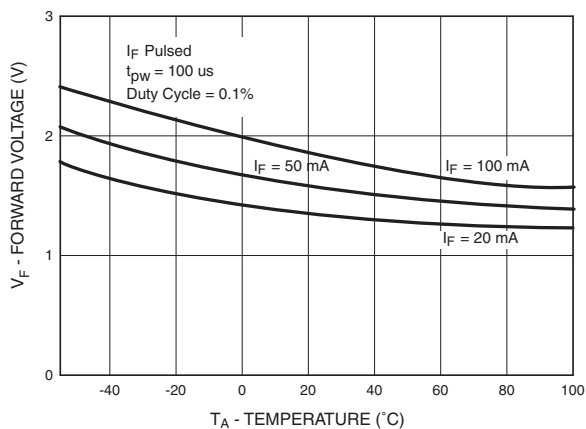


Fig.3 Radiation Diagram

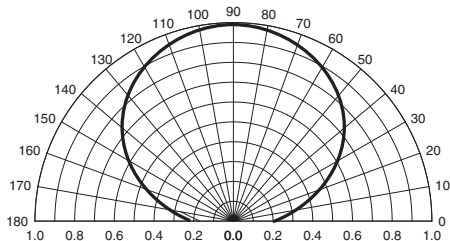


Fig. 5 Spectral Response (TBD)

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