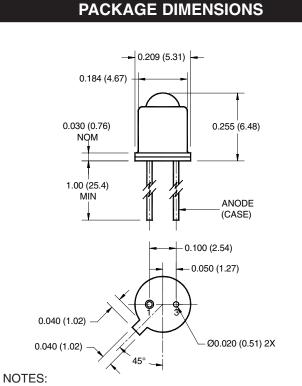
GaAs INFRARED EMITTING DIODE

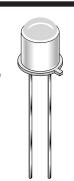
CKAGE DIMENSIONS EFATUR



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

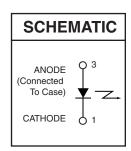
FEATURES

- · Good optical to mechanical alignment
- Mechanically and wavelength matched to the TO-18 series phototransistor
- · Hermetically sealed package
- High irradiance level
- (*) Indicates JEDEC registered values



DESCRIPTION

 The 1N6264 is a 940 nm LED in a narrow angle, TO-46 package.



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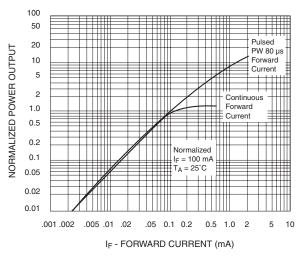
- 1. Derate power dissipation linearly 1.70 mW/°C above 25°C ambient.
- 2. Derate power dissipation linearly 13.0 mW/°C above 25°C case.
- 3. RMA flux is recommended.
- 4. Methanol or isopropyl alcohols are recommended as cleaning agents.
- 5. Soldering iron tip 1/16" (1.6mm) minimum from housing.
- 6. As long as leads are not under any stress or spring tension
- 7. Total power output, P_0 , is the total power radiated by the device into a solid angle of 2 π steradians.

ABSOLUTE MAXIMUM RATINGS (T _A = 25°C unless otherwise specified)								
Parameter	Symbol	Rating	Unit					
* Operating Temperature	T _{OPR}	-65 to +125	°C					
* Storage Temperature	T _{STG}	-65 to +150	°C					
* Soldering Temperature (Iron)(3,4,5 and 6)	T _{SOL-I}	240 for 5 sec	°C					
* Soldering Temperature (Flow)(3,4 and 6)	T _{SOL-F}	260 for 10 sec	°C					
* Continuous Forward Current	I _F	100	mA					
* Forward Current (pw, 1µs; 200Hz)	I _F	10	Α					
* Reverse Voltage	V_{R}	3	V					
* Power Dissipation (T _A = 25°C) ⁽¹⁾	P _D	170	mW					
Power Dissipation $(T_C = 25^{\circ}C)^{(2)}$	Pn	1.3	W					

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C) (All measurements made under pulse conditions)								
PARAMETER	TEST CONDITIONS	SYMBOL	MIN	TYP	MAX	UNITS		
* Peak Emission Wavelength	$I_F = 100 \text{ mA}$	λ_{P}	935	_	955	nm		
Emission Angle at 1/2 Power	I _F = 100 mA	θ	_	±8	_	Deg.		
* Forward Voltage	I _F = 100 mA	V _{F1}	_	_	1.7	V		
* Reverse Leakage Current	V _R = 3 V	I _R	_	_	10	μΑ		
* Total Power	I _F = 100 mA	Po	6	_	_	mW		
Rise Time 0-90% of output		t _r	_	1.0	_	μs		
Fall Time 100-10% of output		t_f	_	1.0	_	μs		



1N6264 GaAs INFRARED EMITTING DIODE





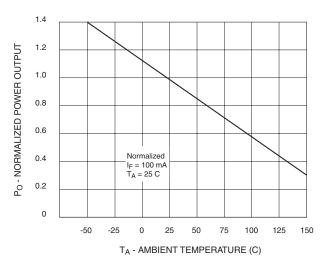


Fig. 2 Power Output vs. Temperature

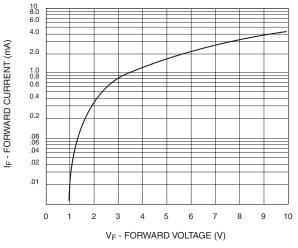


Fig. 3 Forward Voltage vs. Forward Current

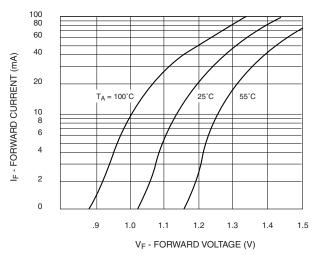
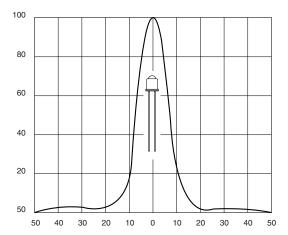


Fig. 4 Forward Voltage vs. Forward Current



 $\boldsymbol{\Theta}$ - ANGULAR DISPLACEMENT FROM OPTICAL AXIS - DEGREES

Fig. 5 Typical Radiation Pattern



1N6264 GaAs INFRARED EMITTING DIODE

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