

IEFC0128

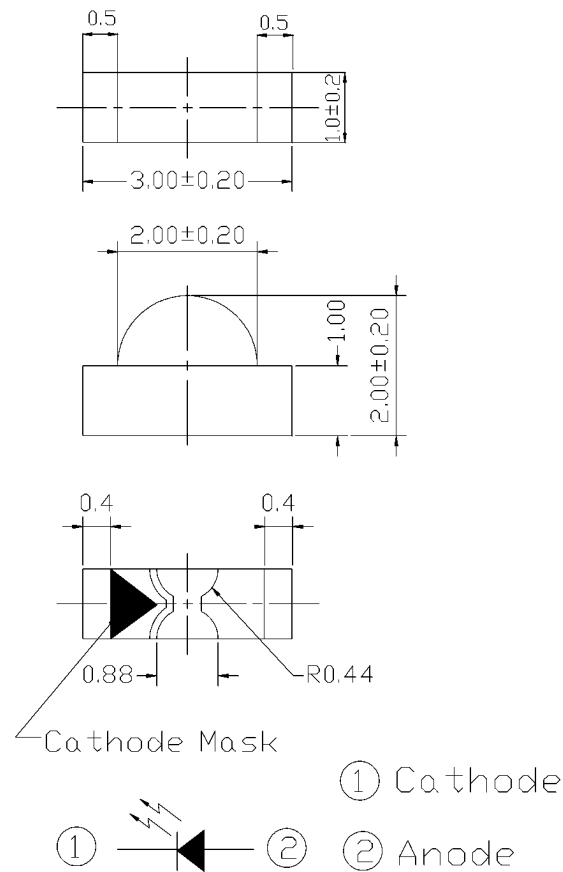
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This lamp is an infrared emitting diode in miniature SMD package. It is molded in a water clear plastic with a right-angle lens.



RoHS Compliant
Aug 2004



PART NO.	Chip		Lens Color
	Material	Emitted Color	
IEFC0128	GaAlAs	IR	Water Clear

* Specifications subject to change without notice. Dimensions are in mm±0.1 unless stated otherwise.

Absolute Maximum Ratings at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Rating	Units
Continuous Forward Current	I_F	65	mA
Operating Temperature	T_{opr}	-25 to +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +85	$^\circ\text{C}$
Soldering Temperature	T_{sol}	260	$^\circ\text{C}$
Power Dissipation at (or below) 25°C Free Air Temperature	P_d	130	mW
Peak Forward Current (Pulse Width = $100\mu\text{s}$ and Duty = 1%)	I_{FP}	1.0	A
Reverse Voltage	V_R	5	V

Electronic Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max	Units	Condition
Radiant Intensity	E_e	0.7	1.3	—	mW/sr	$I_F = 20\text{ mA}$
		—	7.0	—		$I_F=100\text{mA}, t_p=100\mu\text{s}, t_p/T=0.01$
		—	65	—		$I_F=1\text{A}, t_p=100\mu\text{s}, t_p/T=0.01$
Peak Wavelength	λ_p	—	850	—	nm	$I_F = 20\text{ mA}$
Spectral Bandwidth	$\Delta\lambda$	—	45	—	nm	$I_F = 20\text{ mA}$
Forward Voltage	V_F	—	1.45	1.65	V	$I_F = 20\text{ mA}$
		—	1.80	2.40		$I_F=100\text{mA}, t_p=100\mu\text{s}, t_p/T=0.01$
		—	4.10	5.25		$I_F=1\text{A}, t_p=100\mu\text{s}, t_p/T=0.01$
Reverse Current	I_R	—	—	10	μA	$V_R = 5\text{ V}$
View Angle	$2\theta_{1/2}$	—	145	—	deg	$I_F = 20\text{ mA}$

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