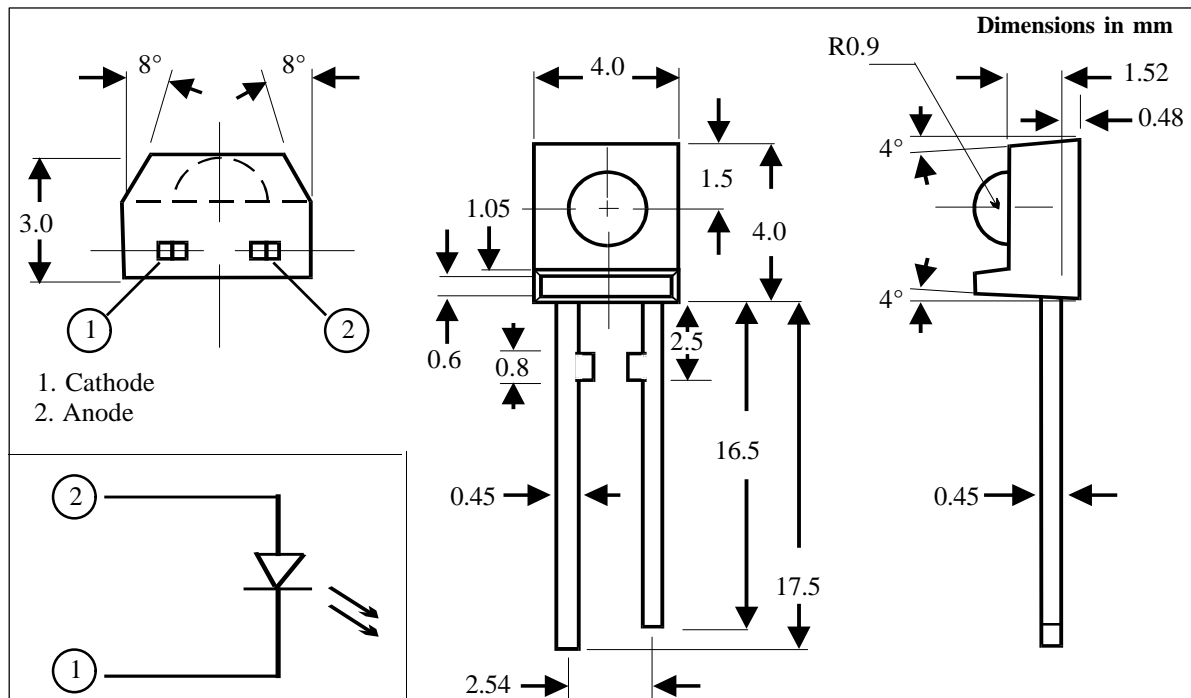


**NARROW BEAM ANGLE
SIDE LOOKING INFRARED
EMITTING DIODE**



DESCRIPTION

The IS656A is a Gallium Arsenide Infrared Emitting Diode mounted in a lateral side looking package. It can be used in conjunction with our series of Schmitt Trigger Detectors - IS657A, IS657B, IS657C, IS657D

FEATURES

- Side looking package.
- High output, Radiant Intensity :-
 $I_E = 0.5\text{mW min. at } I_F = 20\text{mA}$
- Narrow Beam Angle :- Typically $\pm 13^\circ$
- All electrical parameters are 100% tested

APPLICATIONS

- Smoke detectors
- Floppy disk drives
- Infrared applied systems
- VCRs, Video camera
- Optoelectronic switches

**ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)**

Storage Temperature	-40°C to + 85°C
Operating Temperature	-25°C to + 85°C
Lead Soldering Temperature (1/16 inch (1.6mm) from case for 10 secs)	260°C
Forward Current	50mA
Peak Forward Current	1A (note 2)
Reverse Voltage	6V
Power Dissipation	75mW

ISOCOM COMPONENTS LTD

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ISOCOM INC

1024 S. Greenville Ave, Suite 240,
Allen, TX 75002 USA
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e-mail info@isocom.com
http://www.isocom.com

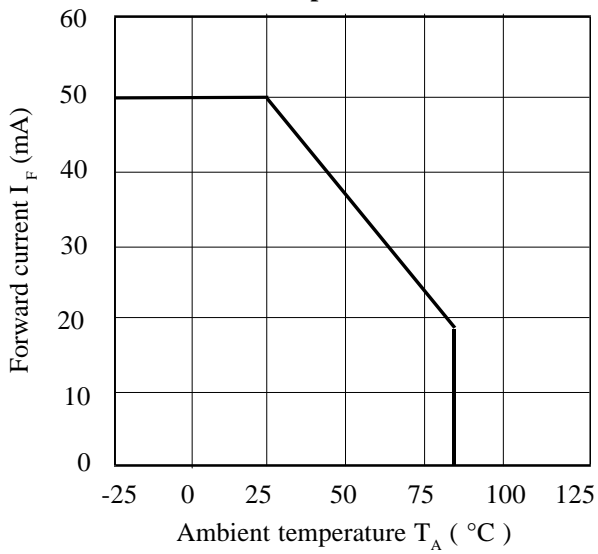
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITION
Forward Voltage (V_F)		1.2	1.4	V	$I_F = 20\text{mA}$
Peak Forward Voltage (V_{FM})		3	4	V	$I_{FM} = 0.5\text{A}$ (note 2)
Reverse Current (I_R)			10	μA	$V_R = 3\text{V}$
Radiant Flux (I_E)	0.5		2.0	mW	$I_F = 20\text{mA}$
Peak Emission Wavelength		950		nm	$I_F = 5\text{mA}$
Spectrum Radiation Bandwidth		45		nm	$I_F = 5\text{mA}$
Beam Emission Angle		± 13		deg.	

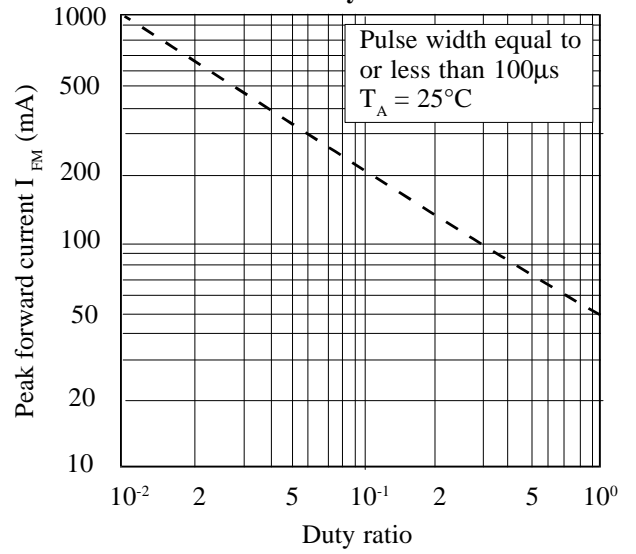
Note 1 Special Selections are available on request. Please consult the factory.

Note 2 Pulse width equal to or less than $100\mu\text{s}$, duty ratio = 0.01

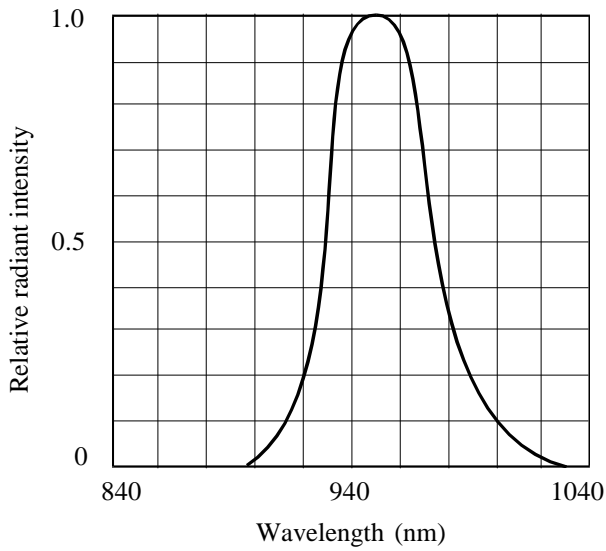
Forward Current vs. Ambient Temperature



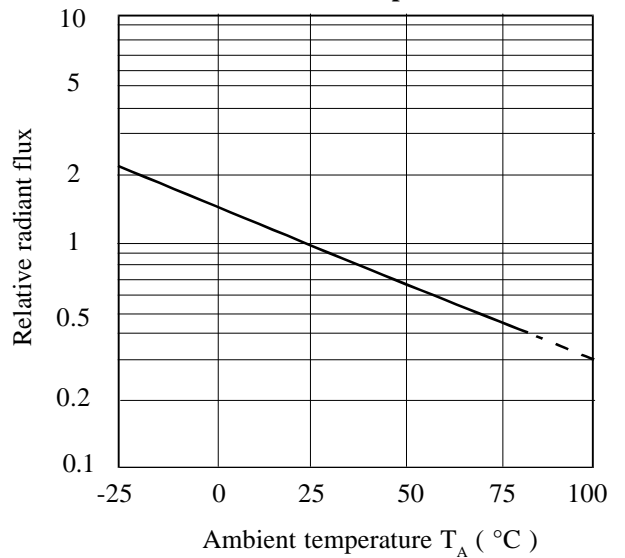
Peak Forward Current vs. Duty Ratio



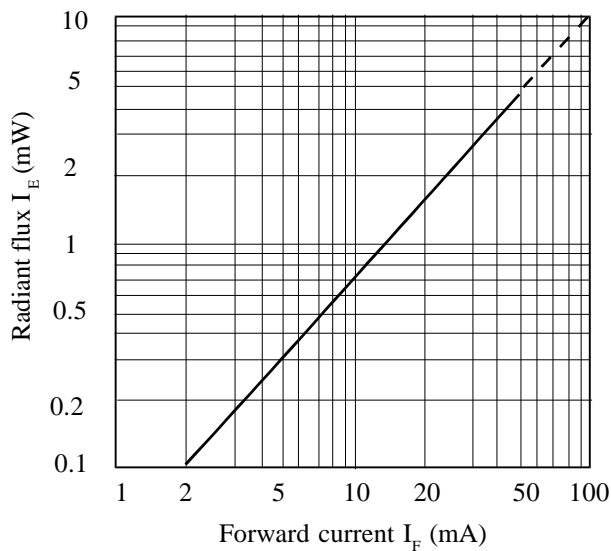
Spectral Distribution



Relative Radiant Flux vs. Ambient Temperature



Radiant Flux vs. Forward Current



Relative Radiant Flux vs. Distance

