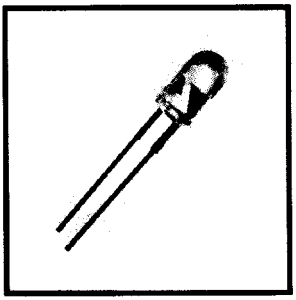
INFRA-RED EMITTING DIODE

ZME50



DESCRIPTION

THE ZME50 IS A GaAlAs INFRA-RED EMITTING DIODE MOULDED IN A CLEAR 5mm Ø PACKAGE WITH A MEDIUM WIDE BEAM, 50°, RADIATION EMISSION ANGLE. THE ZME50 IS SPECTRALLY MATCHED TO THE BPW41 SERIES PIN PHOTODIODES WHICH TOGETHER PROVIDE IDEAL COMPLEMENTS IN I.R. REMOTE CONTROL APPLICATIONS.

ABSOLUTE MAXIMUM RATINGS ($T_A = 25°C$).

PARAMETER	SYMBOL	ZME50	UNIT
Continuous Forward Current	I_F	100	mA
Peak Pulsed Forward Current *	I_{FM}	1	A
Reverse Voltage	V_R	6	V
Power Dissipation @ $T_{amb} = 25°c$	PTOT	175	mW
Operating And Storage Temperature Range		-40 TO +100	°C
Lead Soldering Temperature ($^1/_{16}$" from case)		260	°C

* Pulsed width = 10μS, duty Ratio = 0.01.

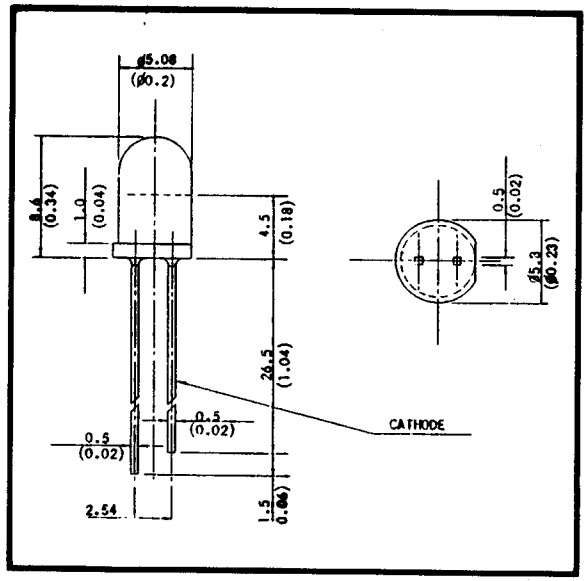
ZETEX

ZME50

CHARACTERISTICS (at Tamb = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN	TYP.	MAX.	UNIT	CONDITIONS.
Radiant Power	P_O	2.62	4.5		mW	I_F=20mA
Forward Voltage	V_F		1.6	2.0	V	I_F=100mA
Reverse Current	I_R			10	µA	V_R=5V
Switching Times	t_r t_f		2 1		µs µs	I_F=20mA
Peak Wavelength	λP		940		nm	I_F=20mA
Spectral Bandwidth	Δλ	45			nm	I_F=20mA
Half Angle	∅		±25		DEG	

PACKAGE DETAILS

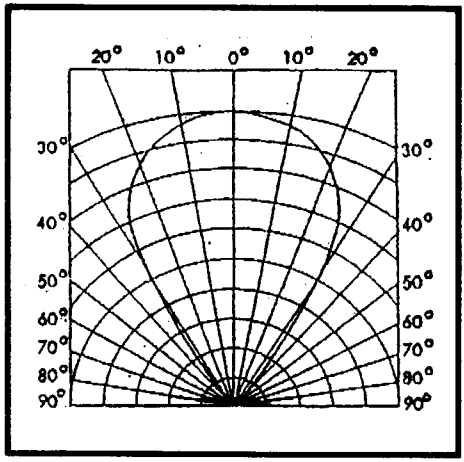


ZETEX

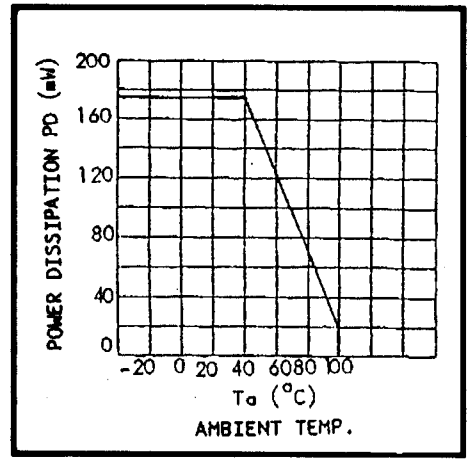
ZME50

TYPICAL CHARACTERISTICS.

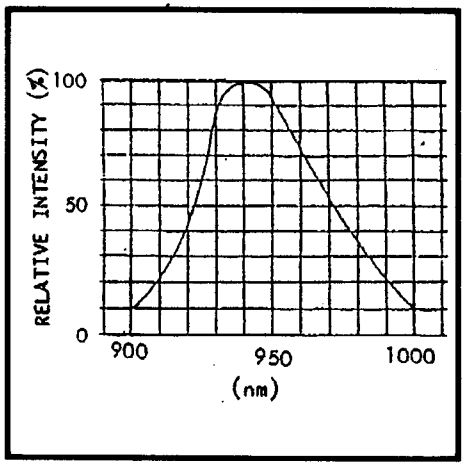
RADIATION PATTERN (T_A = 25°C)



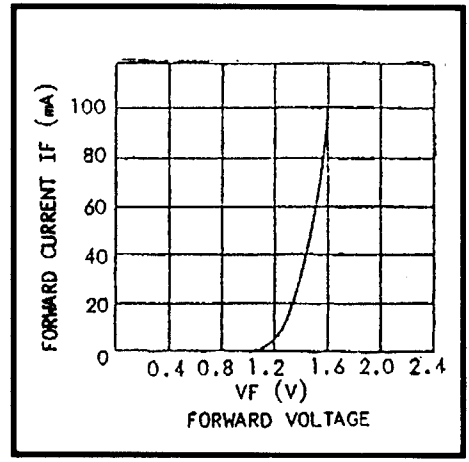
POWER DISSIPATION



RELATIVE INTENSITY VS WAVELENTH



FORWARD CURRENT VS FORWARD VOLTAGE



ZETEX