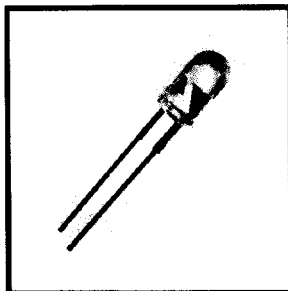


DESCRIPTION

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	P _{TOT}	175	mW
Operating And Storage Temperature Range		-40 TO +100	°C
Lead Soldering Temperature (¹ / ₁₆ " from case)		260	°C

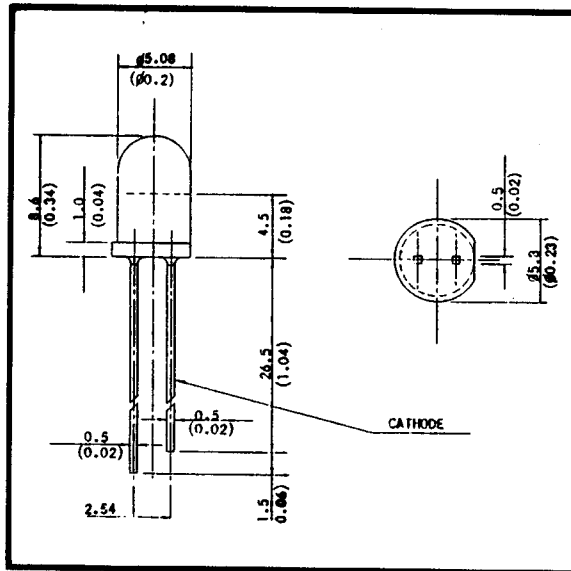
* Pulsed width = 10μS, duty Ratio = 0.01.

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	$I_F=20\text{mA}$
Forward Voltage	V_F		1.6	2.0	V	$I_F=100\text{mA}$
Reverse Current	I_R			10	μA	$V_R=5\text{V}$
Switching Times	t_r t_f		2 1		μs μs	$I_F=20\text{mA}$
Peak Wavelength	λ_P		940		nm	$I_F=20\text{mA}$
Spectral Bandwidth	$\Delta\lambda$	45			nm	$I_F=20\text{mA}$
Half Angle	$\varnothing$		± 25		DEG	

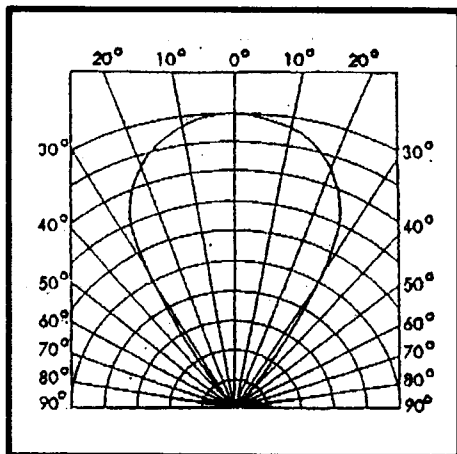
PACKAGE DETAILS



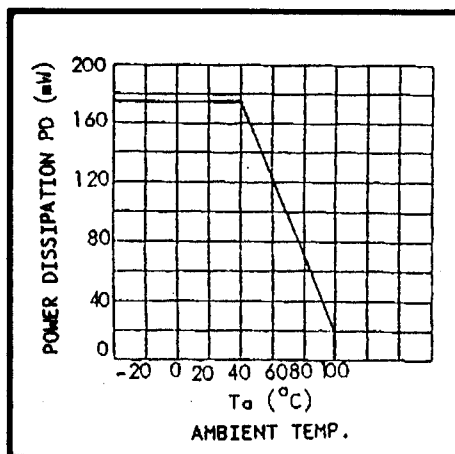
ZME50

TYPICAL CHARACTERISTICS.

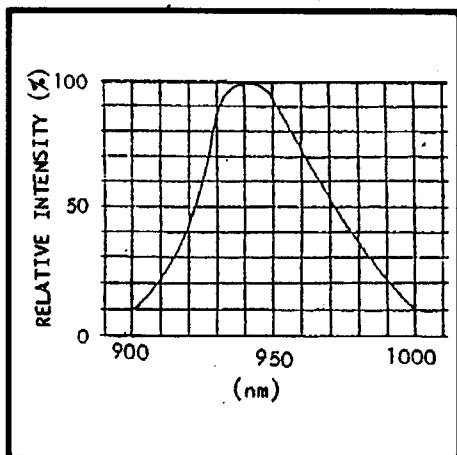
RADIATION PATTERN ($T_A = 25^\circ\text{C}$)



POWER DISSIPATION



RELATIVE INTENSITY VS WAVELENGTH



FORWARD CURRENT VS FORWARD VOLTAGE

