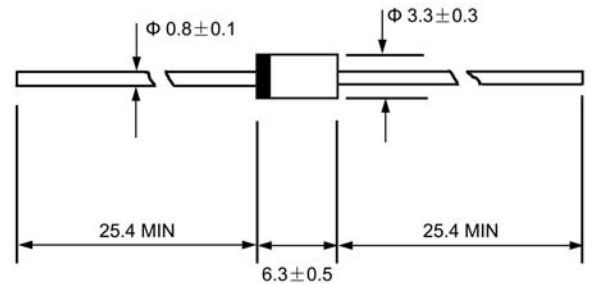



DO - 15


Dimensions in millimeters

Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ◇ Case: JEDEC DO--15, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014 ounces, 0.39 grams
- ◇ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

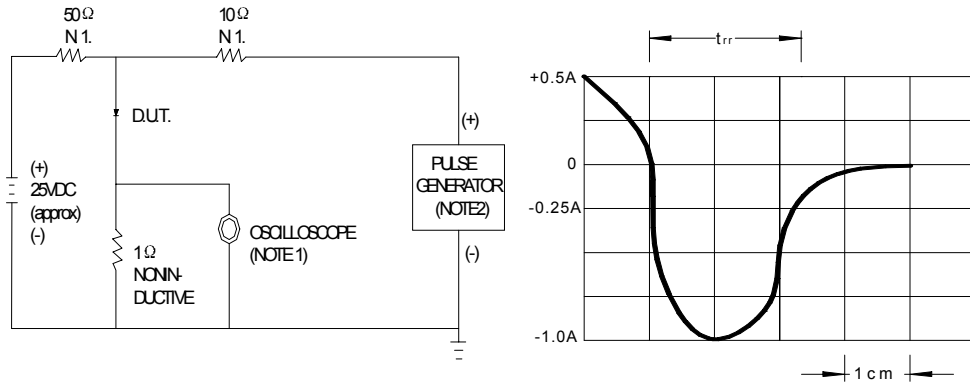
		ERB32 - 01	ERB32 - 02	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	V
Maximum RMS voltage	V_{RMS}	70	140	V
Maximum DC blocking voltage	V_{DC}	100	200	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	1.2		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	I_{FSM}	50.0		A
Maximum instantaneous forward voltage @ 1.2A	V_F	0.92		V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R	5.0	50.0	μA
Maximum reverse recovery time (Note1)	t_{rr}	50		ns
Typical junction capacitance (Note2)	C_J	50		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	50		$^\circ C/W$
Operating junction temperature range	T_J	- 55 ----- + 150		$^\circ C$
Storage temperature range	T_{STG}	- 55 ----- + 150		$^\circ C$

 NOTE: 1. Measured with $I_F=0.5A$, $I_R=1A$, $t_{rr}=0.25A$.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

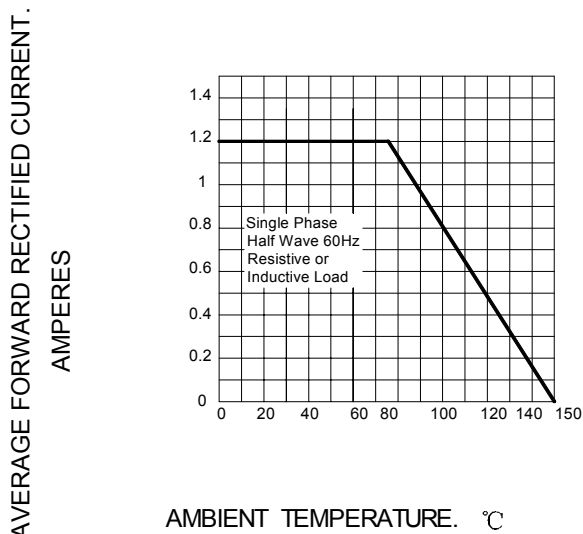
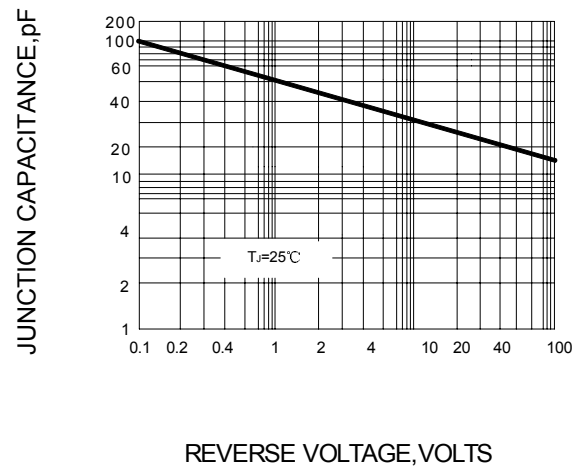
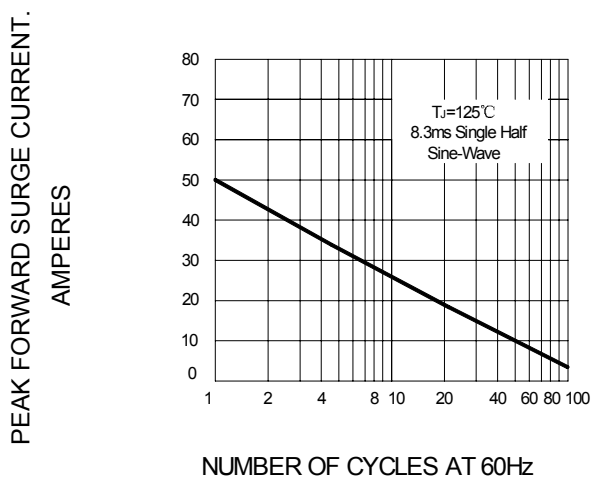
3. Thermal resistance from junction to ambient.

Ratings AND Characteristic Curves

FIG.1--TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC


NOTES: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ. 22pF
 2. RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω.

SET TIME BASE FOR 20/30 ns/cm

FIG.2 --FORWARD DERATING CURVE

FIG.3--TYPICAL JUNCTION CAPACITANCE

FIG.4--PEAK FORWARD SURGE CURRENT

FIG.5 -- TYPICAL FORWARD CHARACTERISTIC
