TAYCHIPST

HIGH EFFICIENCY RECTIFIER

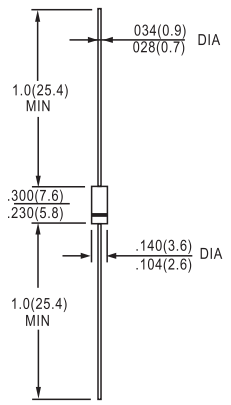
ERB32-01 THRU ERB32-02

100V-200V 1.2A

FEATURES

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

DO-15



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case:JEDEC DO--15,molded plastic
Terminals: Axial lead ,solderable per
MIL- STD-202,Method 208
Polarity: Color band denotes cathode
Weight: 0.014 ounces,0.39 grams
Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

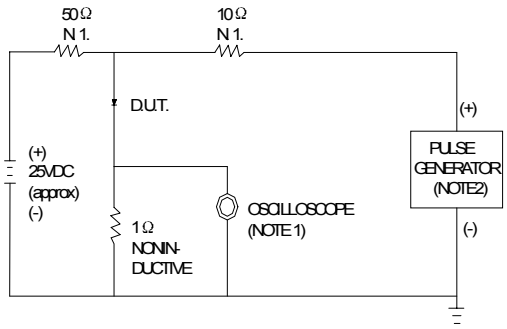
Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

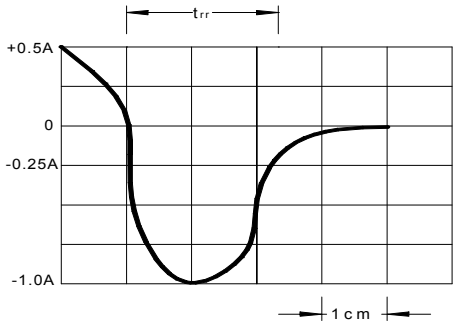
		ERB32 - 01	ERB32 - 02	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	V
Maximum RMS voltage	V_{RMS}	70	140	V
Maximum DC blocking voltage	V_{DC}	100	200	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.2		A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	50.0		A
Maximum instantaneous forw ard voltage @ 1.2A	V_F	0.92		V
Maximum reverse current @T_A=25℃	I_R	5.0		μA
at rated DC blocking voltage @T_A=100℃		50.0		
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		℃/W
Operating junction temperature range	T_J	- 55 ----- + 150		℃
Storage temperature range	T_{STG}	- 55 ----- + 150		℃

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Measured at 1.0MH_Z and applied reverse voltage of 4.0V DC.
3. Thermal resistance from junction to ambient.

RATINGS AND CHARACTERISTIC CURVES ERB32-01 THRU ERB32-02

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

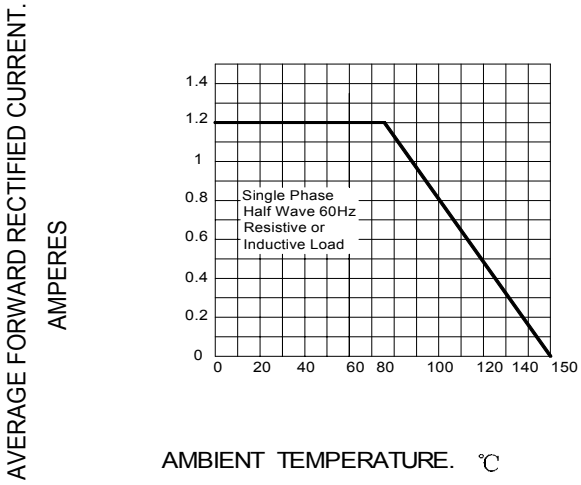


FIG.3--TYPICAL JUNCTION CAPACITANCE

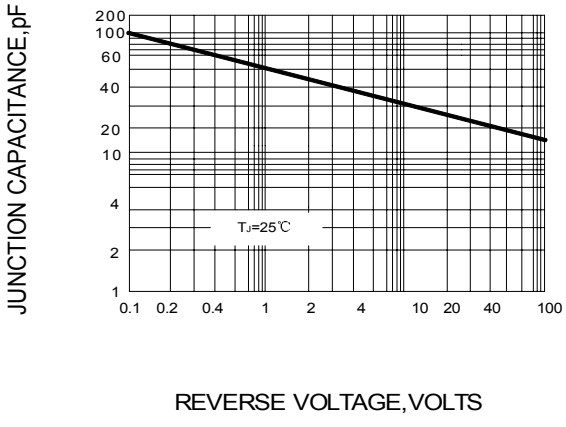


FIG.4--PEAK FORWARD SURGE CURRENT

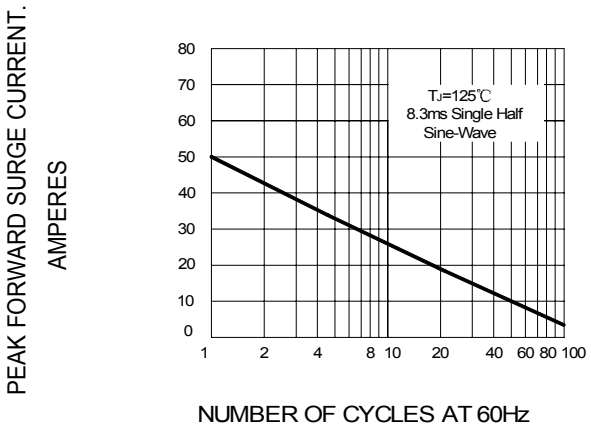


FIG.5 -- TYPICAL FORWARD CHARACTERISTIC