

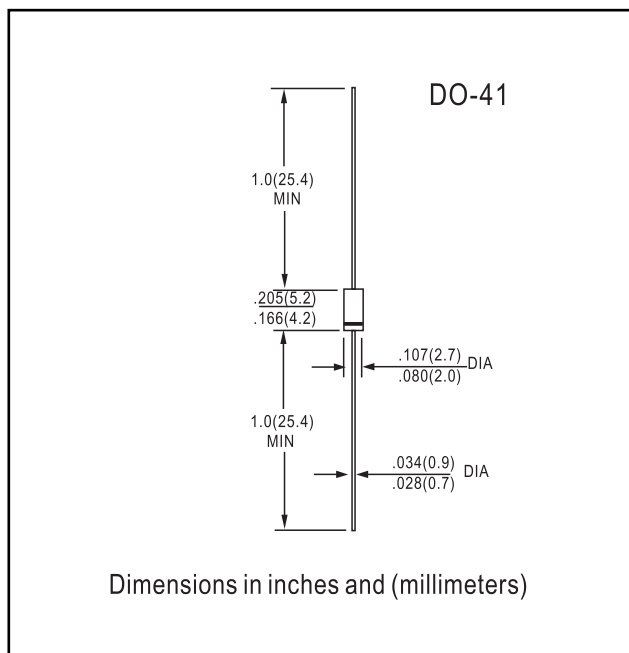


FEATURES

- 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

MECHANICAL DATA

Case:JEDEC DO-41,molded plastic
 Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
 Polarity: Color band denotes cathode
 Weight: 0.012 ounces,0.34 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%.

		ERB37-08	ERB37-10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	800	1000	V
Maximum RMS voltage	V_{RMS}	560	700	V
Maximum DC blocking voltage	V_{DC}	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	1.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	I_{FSM}	30.0		A
Maximum instantaneous forward voltage @ 1.0 A	V_F	1.5		V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R	5.0	100.0	μA
Maximum reverse recovery time (Note1)	t_{rr}	250		ns
Typical junction capacitance (Note2)	C_J	12		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	55		$^\circ C/W$
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 ERB37-08 THRU ERB37-10

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

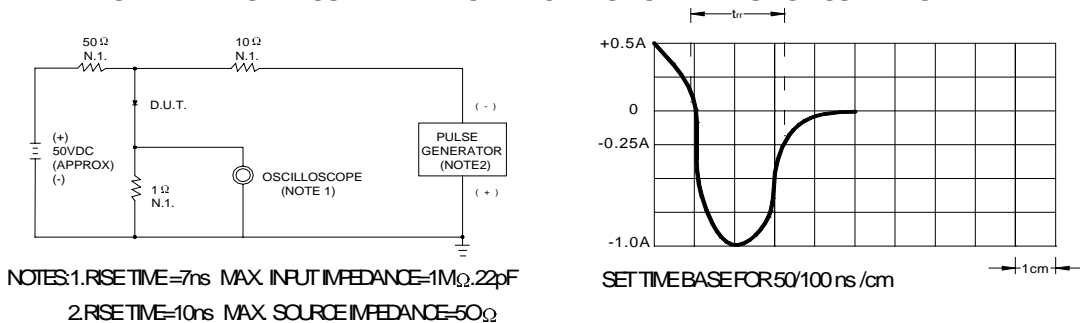


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

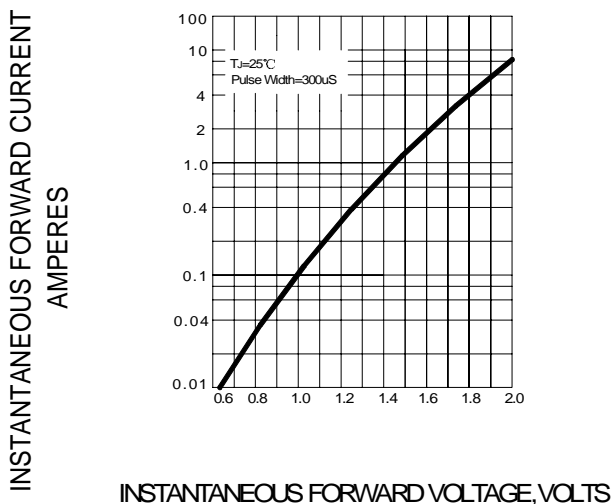


FIG.3 – FORWARD DERATING CURVE

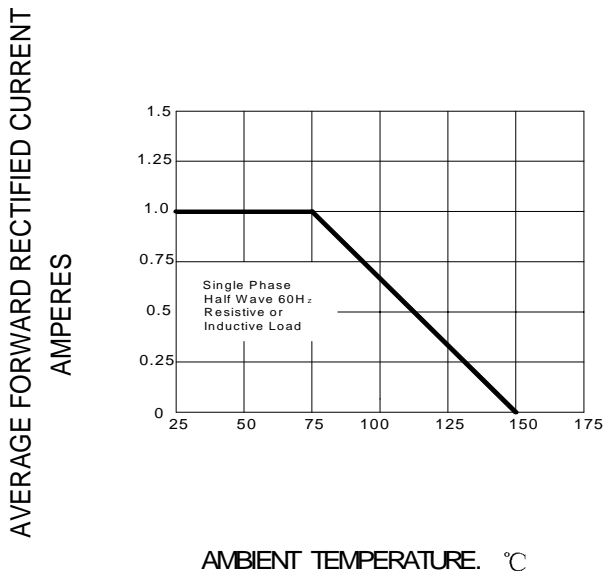


FIG.4 – TYPICAL JUNCTION CAPACITANCE

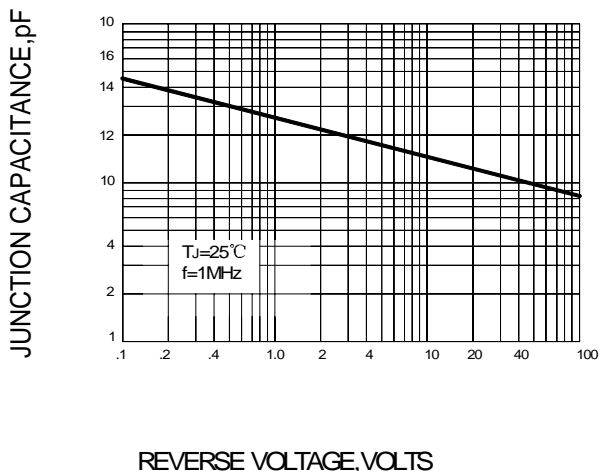


FIG.5 – PEAK FORWARD SURGE CURRENT

