

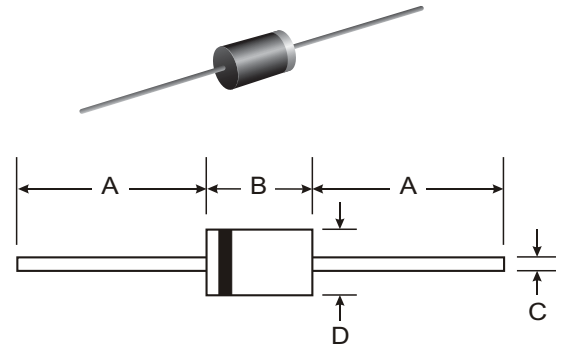
VOLTAGE RANGE: 200 - 1000V
CURRENT: 1.0 A

Features

- 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: DO-41, molded plastic
- Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Mounting position: Any
- Weight: 0.35 grams (approx.)



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	ERB44-02	ERB44-04	ERB44-06	ERB44-08	ERB44-10	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	I_{FSM}	30.0					A
Maximum instantaneous forward voltage @ 1.0 A	V_F	1.1					V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 100.0					μA
Maximum reverse recovery time (Note1)	t_{rr}	400					ns
Typical junction capacitance (Note2)	C_J	12					pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	55					$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55---- +150					$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55---- + 150					$^\circ\text{C}$

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

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

3. Thermal resistance from junction to ambient.

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

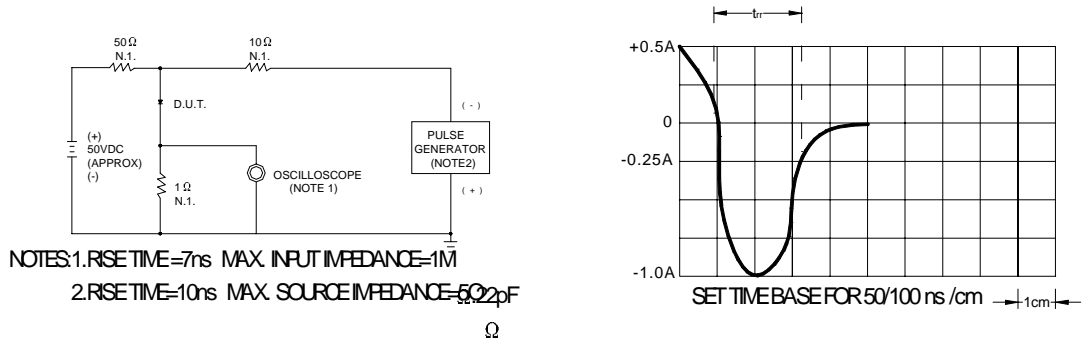


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

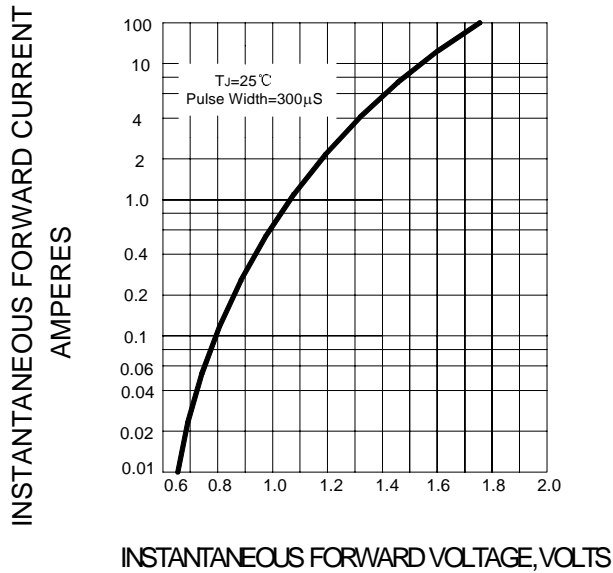


FIG.3 – FORWARD DERATING CURVE

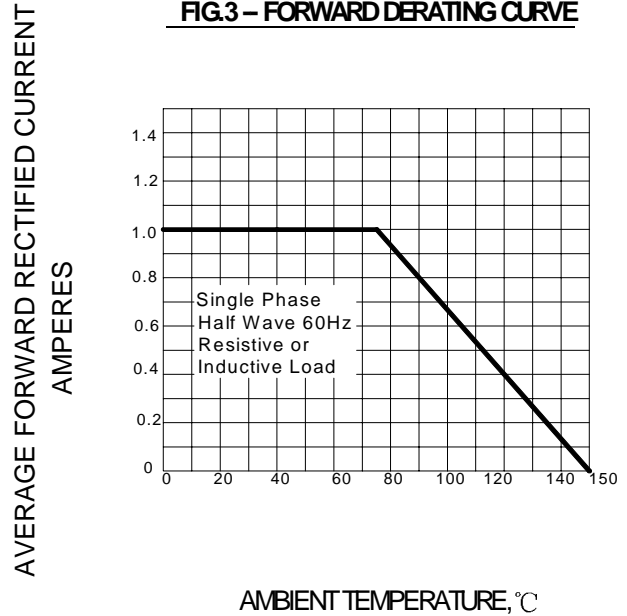


FIG.4 – TYPICAL JUNCTION CAPACITANCE

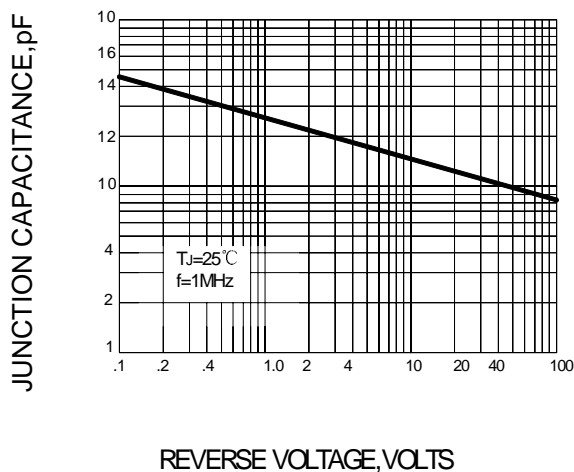


FIG.5 – PEAK FORWARD SURGE CURRENT

