ERA34-10

FAST RECOVERY RECTIFIER DIODES

VOLTAGE RANGE: 1000V
CURRENT: 0.1A

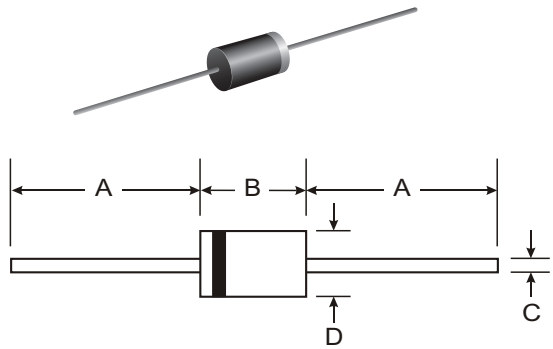
Features

- 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
- Weight: 0.012 ounces,0.34 grams
- Mounting position: Any

RoHS COMPLIANT



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		

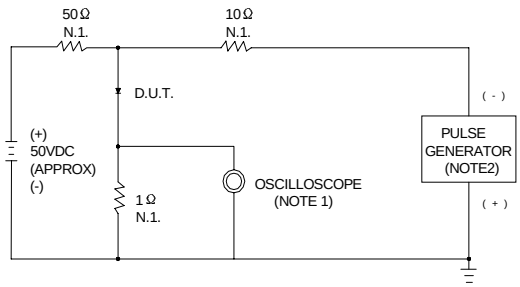
Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

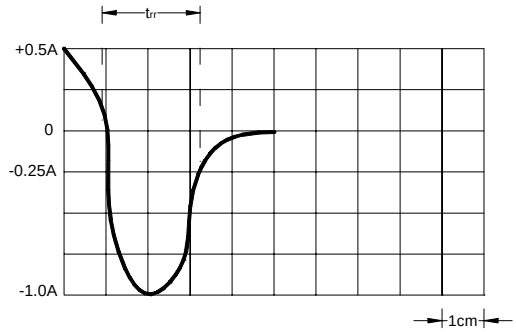
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	**Symbol**	ERA34-10	**Unit**
Maximum recurrent peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	0.1	A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	10.0	A
Maximum instantaneous forw ard voltage @ 0.1 A	V_F	1.0	V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0	μA
Maximum reverse recovery time (Note1)	t_{rr}	150	ns
Typical junction capacitance (Note2)	C_J	12	pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	55	℃/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 1.0MHz and applied rev erse v oltage of 4.0V DC.
3. Thermal resistance from junction to ambient.

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





NOTES:1.RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ,22pF

2.RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω

SET TIME BASE FOR 50/100 ns /cm

FIG.2 –FORWARD DERATING CURVE

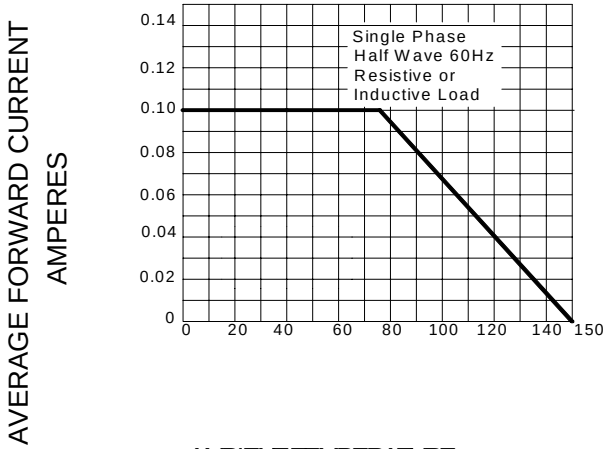


FIG.3—TYPICAL JUNCTION CAPACITANCE

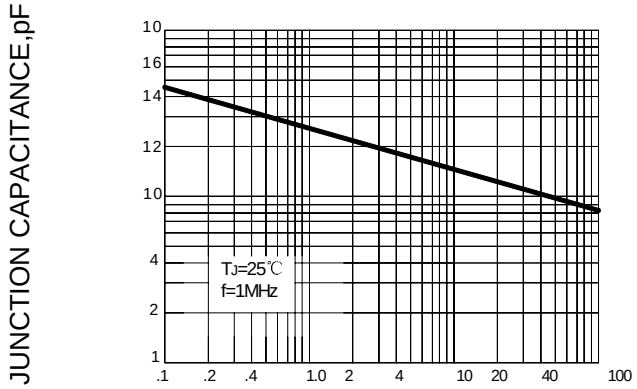


FIG.4–PEAK FORWARD SURGE CURREN

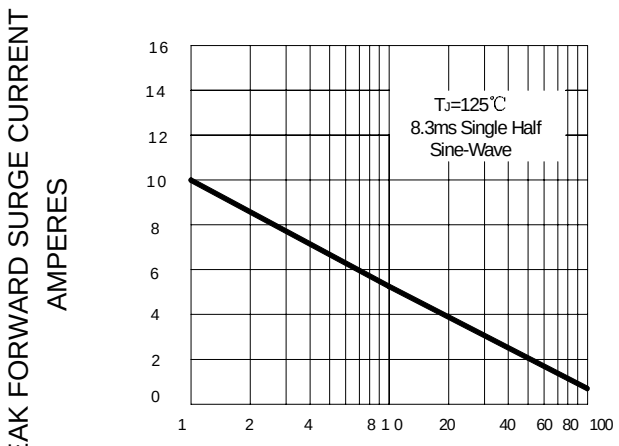


FIG.5—TYPICAL FORWARD CHARACTERISTIC