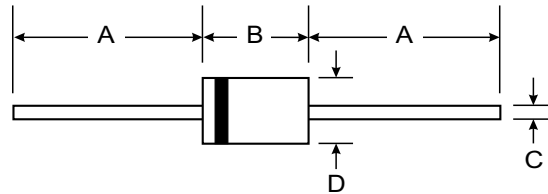


Features

- 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

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%.

		ERA32 - 01	ERA32 - 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°C	I _{F(AV)}	1.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}	40.0		A
Maximum instantaneous forward voltage @ 1.0A	V _F	0.92		V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	5.0	50.0	μA
Maximum reverse recovery time (Note1)	t _{rr}	50		ns
Typical junction capacitance (Note2)	C _J	20		pF
Typical thermal resistance (Note3)	R _{θJA}	60		°C/W
Operating junction temperature range	T _J	- 55 ----- + 150		°C
Storage temperature range	T _{STG}	- 55 ----- + 150		°C

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

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

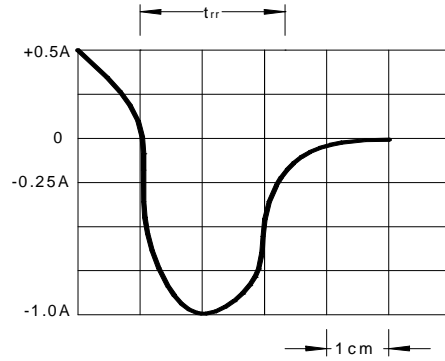
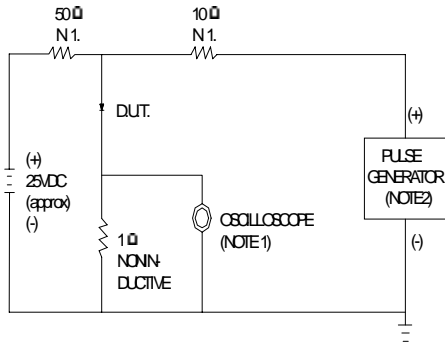
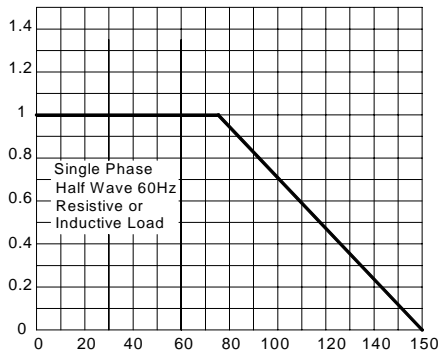


FIG.3 -FORWARD DERATING CURVE

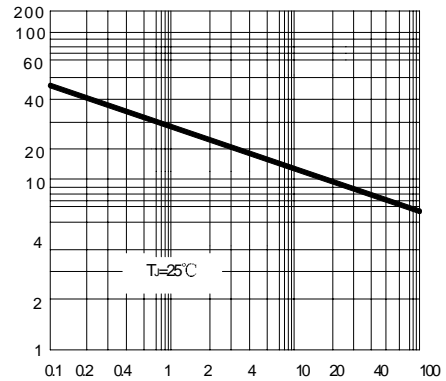
AVERAGE FORWARD RECTIFIED CURRENT. AMPERES



AMBIENT TEMPERATURE. °C

FIG.4-TYPICAL JUNCTION CAPACITANCE

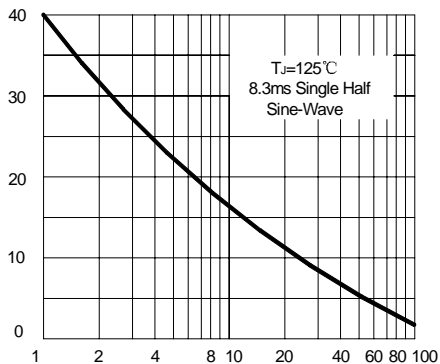
JUNCTION CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS

FIG.5-PEAK FORWARD SURGE CURRENT

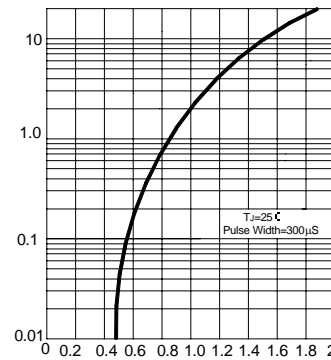
PEAK FORWARD SURGE CURRENT. AMPERES



NUMBER OF CYCLES AT 60Hz

FIG.1 - TYPICAL FORWARD CHARACTERISTIC

INSTANTANEOUS FORWARD CURRENT AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS