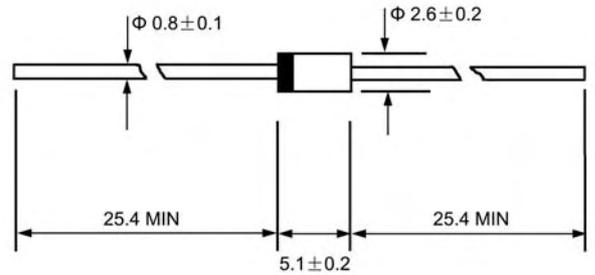



**DO - 41**


Dimensions in millimeters

**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
- ◇ 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.

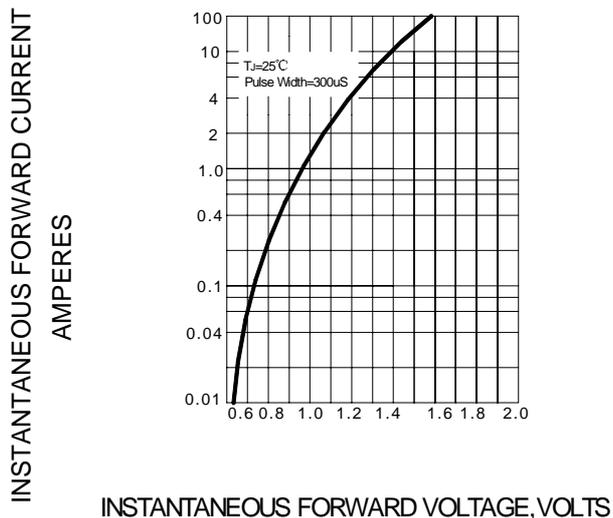
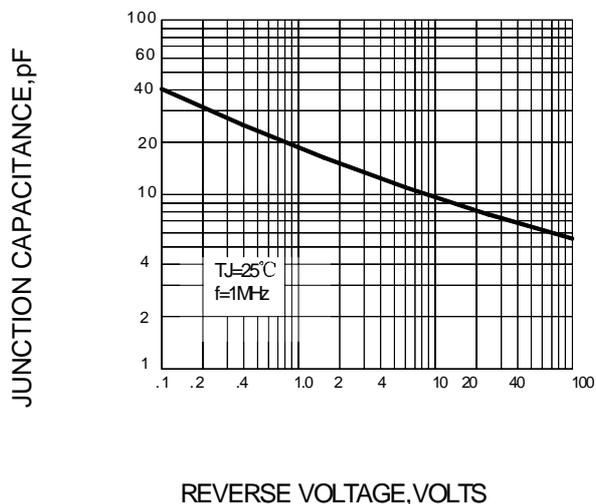
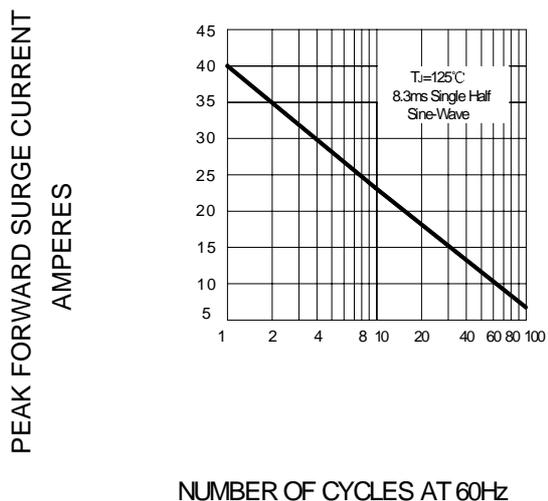
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		ERA15 -01	ERA15 -02	ERA15 -04	ERA15 -06	ERA15 -08	ERA15 -10	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	100	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 @ $T_J=125^\circ\text{C}$	$I_{FSM}$	40.0						A
Maximum instantaneous forward voltage @ 1.0 A	$V_F$	1.0						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 50.0						$\mu\text{A}$
Typical junction capacitance (Note1)	$C_J$	15						pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	50						$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	- 55---- + 150						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55---- + 150						$^\circ\text{C}$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.

## Ratings AND Characteristic Curves

**FIG.1 – TYPICAL FORWARD CHARACTERISTIC**

**FIG.2 – TYPICAL JUNCTION CAPACITANCE**

**FIG.3 – PEAK FORWARD SURGE CURRENT**

**FIG.4 – FORWARD DERATING CURVE**
