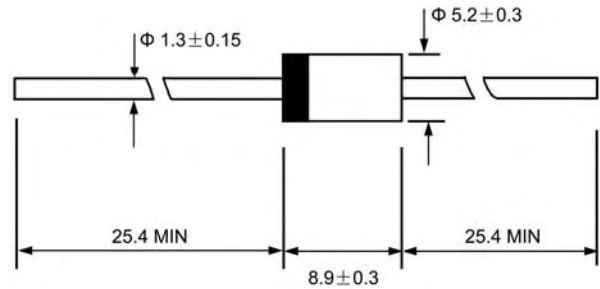



**DO - 27**


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--27, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL- STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041 ounces, 1.15 grams
- ◇ Mounting position: Any

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

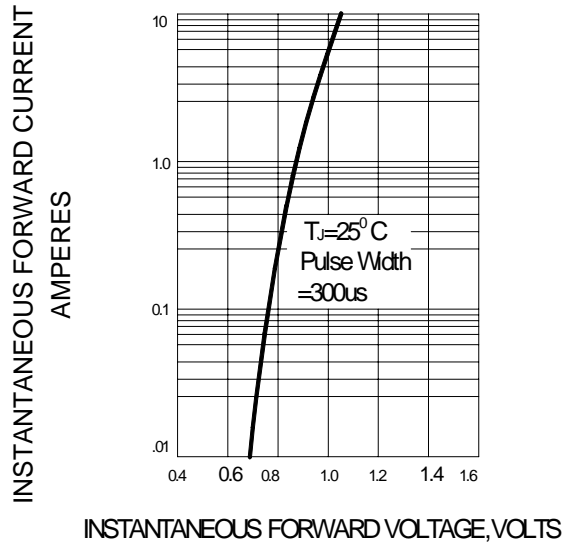
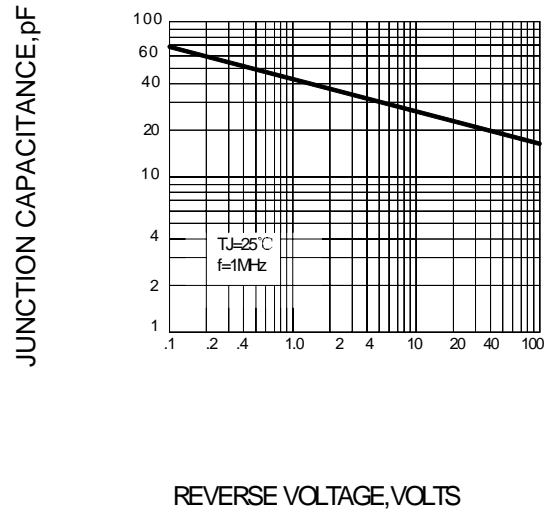
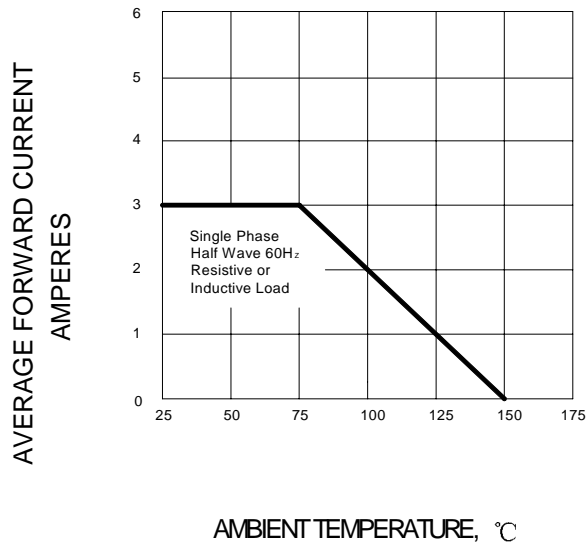
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		ERD03 -02	ERD03 -04	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	200	400	V
Maximum RMS voltage	$V_{RMS}$	140	280	V
Maximum DC blocking voltage	$V_{DC}$	200	400	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	3.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	$I_{FSM}$	200.0		A
Maximum instantaneous forward voltage @ 3.0 A	$V_F$	1.0		V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	10.0	100.0	$\mu\text{A}$
Typical junction capacitance (Note1)	$C_J$	35		pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	20		$^\circ\text{C}/\text{W}$
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 CHARACTERISTICS**

**FIG.3 – FORWARD DERATING CURVE**

**FIG.4 – PEAK FORWARD SURGE CURRENT**
