

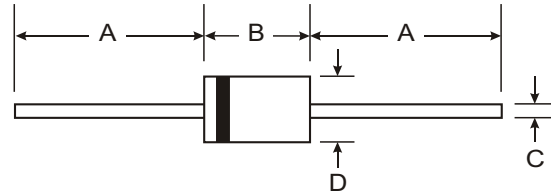
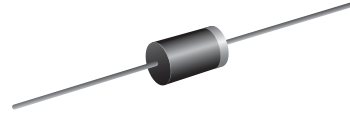
**VOLTAGE RANGE: 90V**  
**CURRENT: 1.0 A**

### Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

### Mechanical Data

- Case: DO-41, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



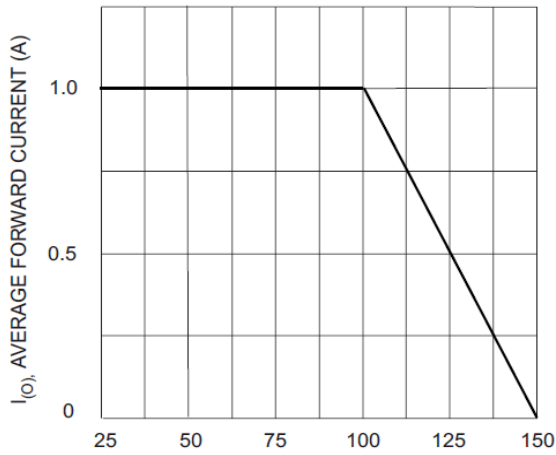
DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

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

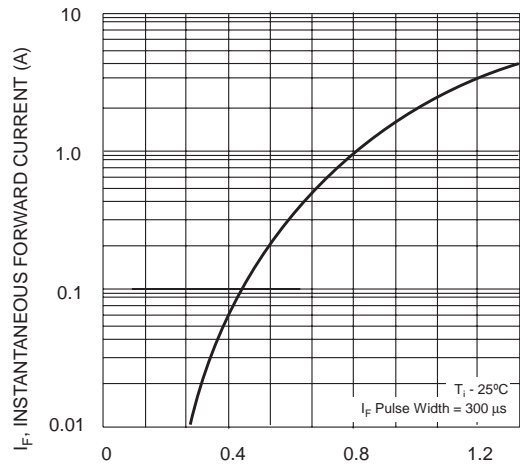
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ERA84-009	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	90	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average Rectified Output Current @ $T_L = 100^{\circ}\text{C}$ (Note 1)	$I_o$	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40	A
Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$	0.85	V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	$I_{RM}$	10	mA
Typical Junction Capacitance (Note 2)	$C_j$	80	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	15	$^{\circ}\text{C/W}$
	$R_{\theta JA}$	50	
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	$^{\circ}\text{C}$

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



$T_L$ , LEAD TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FWD VOLTAGE (V)  
Fig. 2 Typ. Forward Characteristics

Fig. 1 Forward Current Derating Curve

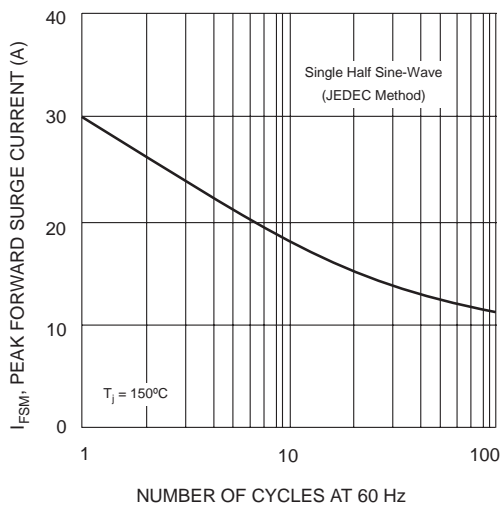
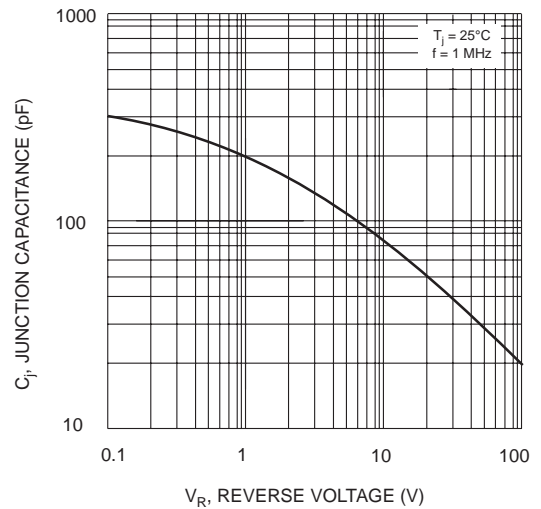
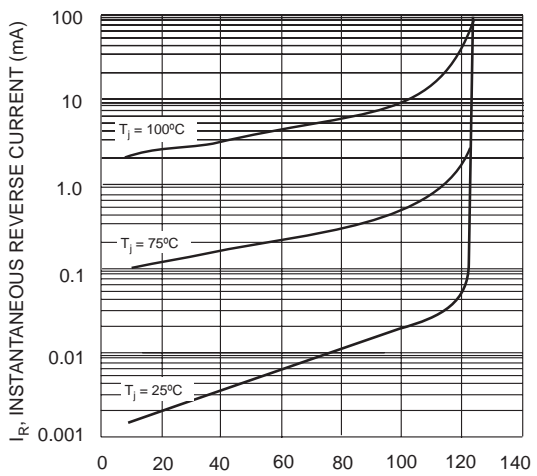


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 5 Typical Reverse Characteristics