

SCHOTTKY BARRIER RECTIFIER DIODES

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 Mathad 202

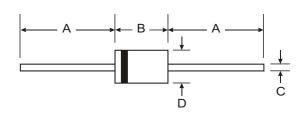
MIL-STD-202, Method 208Polarity: Cathode Band

Weight: 0.34 grams (approx.)

Mounting Position: AnyMarking: Type Number







DO-41			
Dim	Min	Max	
Α	25.40	_	
В	4.06	5.21	
С	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

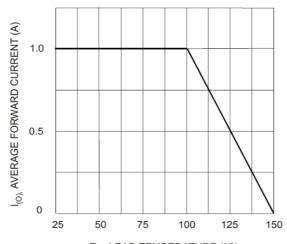
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ERA84-009	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	90	V
RMS Reverse Voltage	VR(RMS)	70	٧
Average Rectified Output Current $@T_L = 100^{\circ}C$ (Note 1)	lo	1.0	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İFSM	40	А
Forward Voltage $@I_F = 1.0A$	VFM	0.85	V
	IRM	10	mA
Typical Junction Capacitance (Note 2)	Cj	80	pF
Typical Thermal Resistance (Note 1)	R θ JL R θ JA	15 50	°C/W
Operating and Storage Temperature Range	Тј, Тѕтс	-65 to +150	°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

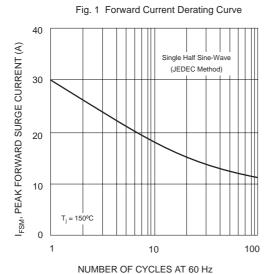


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

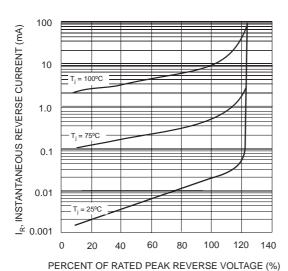
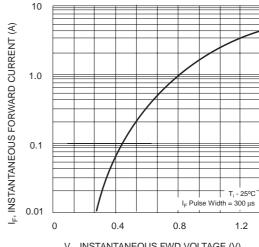


Fig. 5 Typical Reverse Characteristics



 ${
m V_{F}},$ INSTANTANEOUS FWD VOLTAGE (V) Fig. 2 Typ. Forward Characteristics

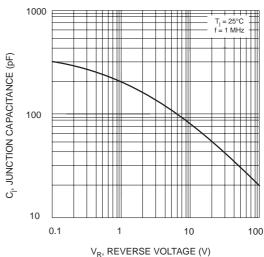


Fig. 4 Typical Junction Capacitance