

Dual Schottky Barrier Power Rectifier

Reverse Voltage 90 Volts Forward Current 20 Amperes

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. The proprietary barrier technology allows for reliable operation up to 175°C junction temperature. Typical application are in switching Mode Power Supplies such as adaptors, DC/DC converters, free-wheeling and polarity protection diodes.

Features

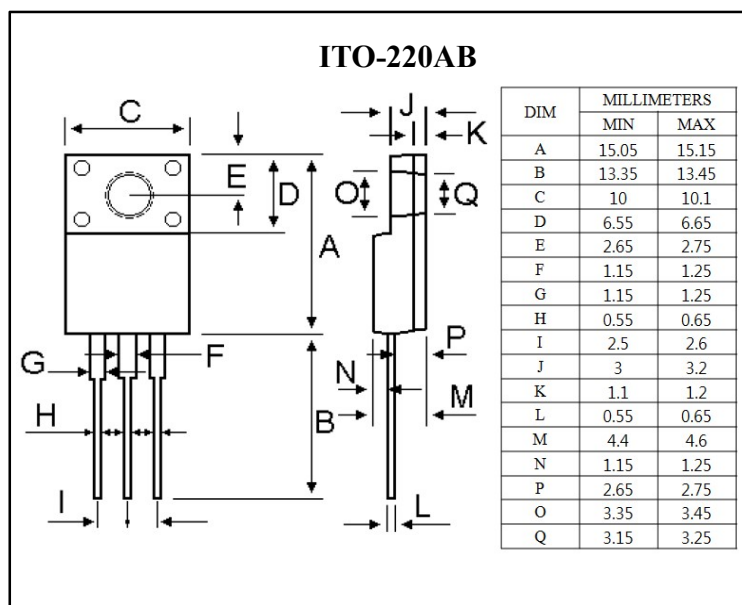
- Low Forward Voltage.
- Low Switching noise.
- High Current Capacity
- Guarantee Reverse Avalanche.
- Guard-Ring for Stress Protection.
- Low Power Loss & High efficiency.
- 175°C Operating Junction Temperature
- Low Stored Charge Majority Carrier Conduction.
- Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O

Mecanical Data

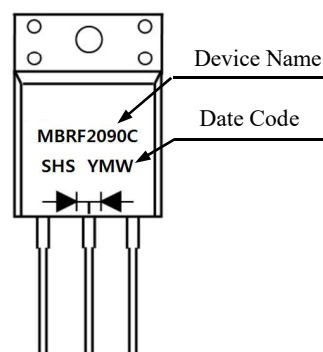
- Case :JEDEC ITO-220AB molded plastic body
- Terminals:Plated lead,solderable per MIL-STD-750, Method 2026
- Polarity:As marked
- Mounting Torque: 4-6kg.cm
- Weight :2.24 g (approx.)

Maximum Ratings & Electrical Characteristics

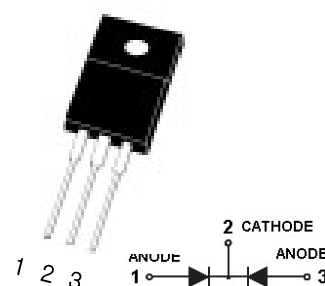
Parameter	Symbol	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	90	V	
Maximum RMS Voltage	V_{RMS}	63	V	
Maximum DC Blocking Voltage	V_{DC}	90	V	
Maximum Average Forward Rectified Current (Rated V_R)	$I_F(AV)$	10	A	Per Diode
		20		Total Device
Peak Repetitive Forward Current	I_{FM}	20	A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150	A	
Maximum Instantaneous Forward Voltage at 10.0A	V_F	0.85	V	$T_a=25^{\circ}C$
	V_F	0.75	V	$T_a=125^{\circ}C$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1	mA	$T_a=25^{\circ}C$
		10	mA	$T_a=125^{\circ}C$
Typical Thermal Resistance Junction to Case	$R_{th(j-c)}$	3.4	$^{\circ}C/W$	
Operation Junction Temperature Range	T_J	-65 to +175	$^{\circ}C$	
Storage Temperature Range	T_{STG}	-65 to +175	$^{\circ}C$	



Marking



Equivalent Circuit





Ratings and Characteristics Curves ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

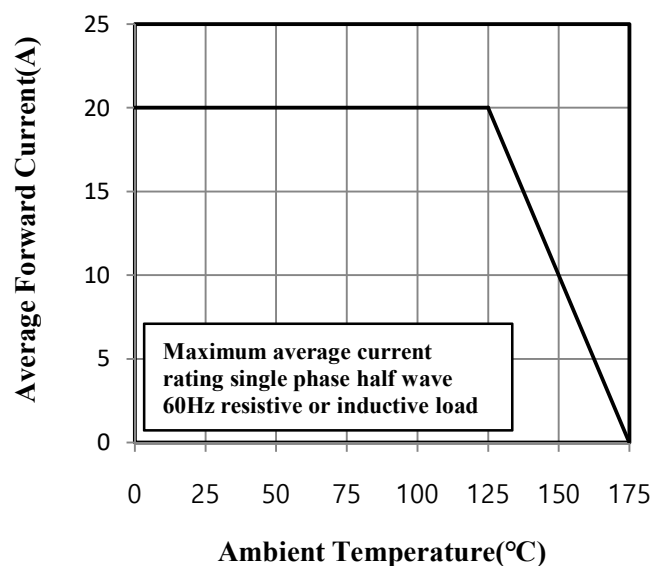


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

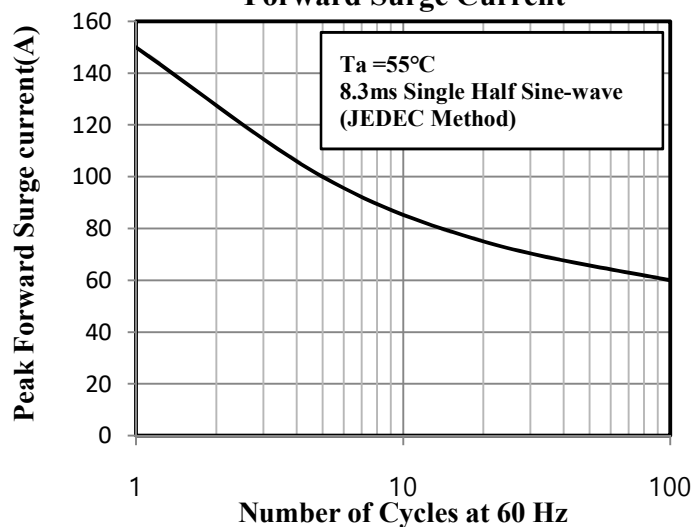


Fig.3 Typical Instantaneous Forward Characteristics

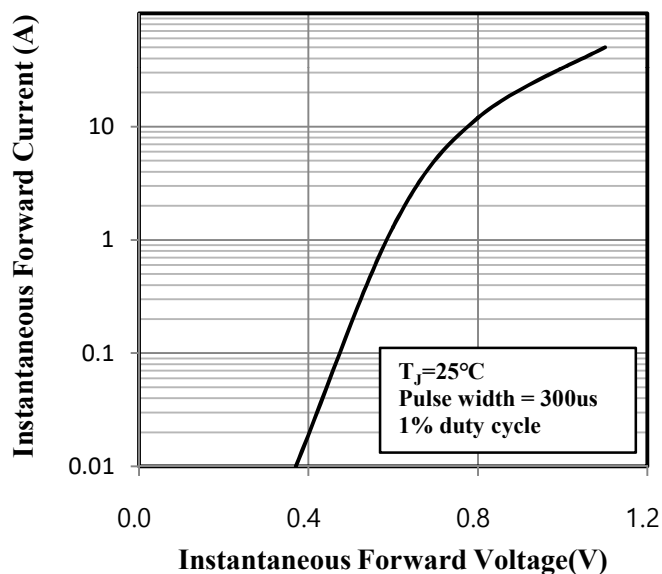


Fig.4 Typical Junction Capacitance

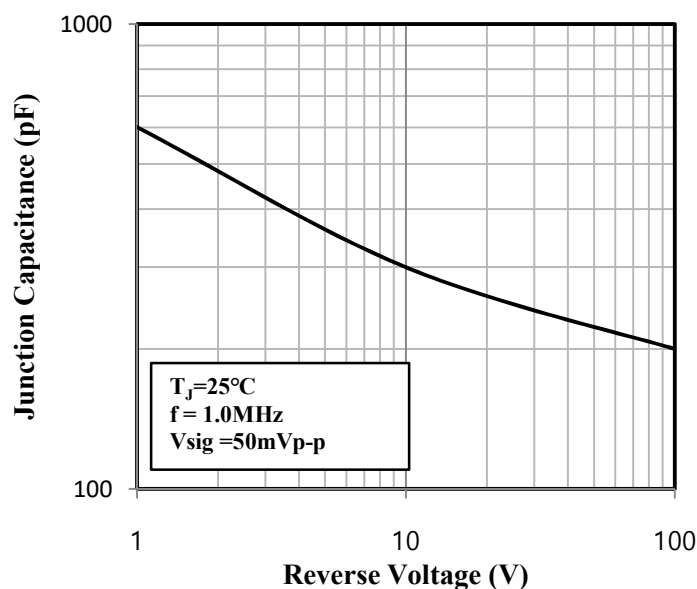


Fig.5 Typical Reverse Characteristics

