

## Dual Schottky Barrier Power Rectifier

### Reverse Voltage 100 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

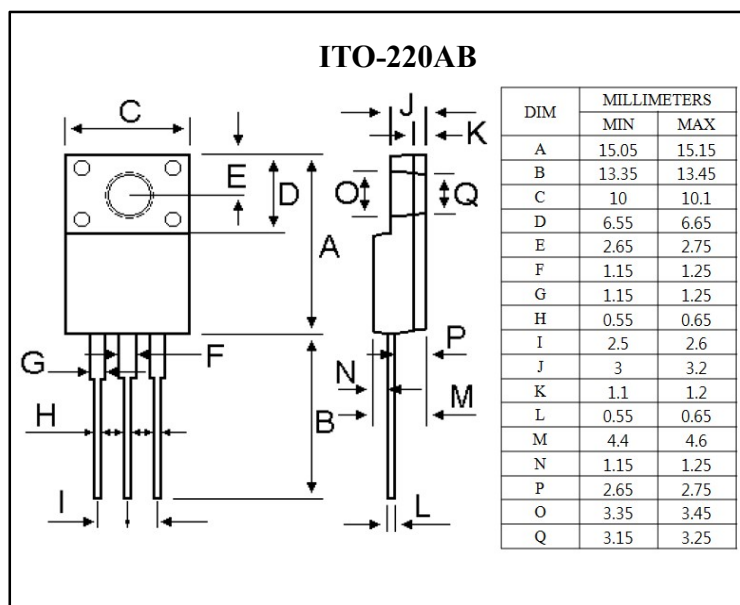
- Low Forward Voltage.
- Low Switching noise.
- High Current Capacity
- Guarantee Reverse Avalanche.
- Guard-Ring for Stress Protection.
- Low Power Loss & High efficiency.
- 175°C Operating Junction Temperature
- Low Stored Charge Majority Carrier Conduction.
- Plastic Material used Carries Underwriters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

#### Mecanical Data

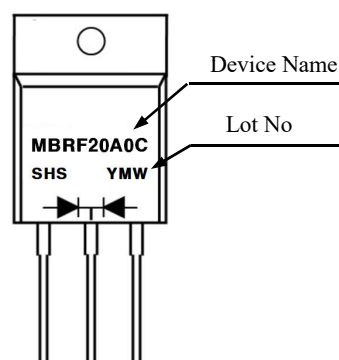
- Case :JEDEC ITO-220AB molded plastic body
- Terminals:Plated lead,solderable per MIL-STD-750, Method 2026
- Polarity:As marked
- Mounting Torque: 4-6kg.cm
- Weight :2.24 g (approx.)

#### Maximum Ratings & Electrical Characteristics

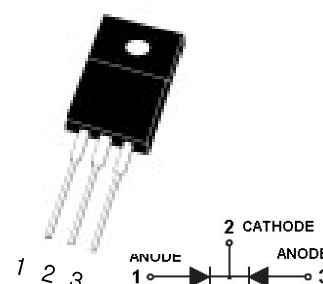
Parameter	Symbol	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V	
Maximum RMS Voltage	$V_{RMS}$	70	V	
Maximum DC Blocking Voltage	$V_{DC}$	100	V	
Maximum Average Forward Rectified Current Total Device (Rated $V_R$ )	$I_F(AV)$	10	A	
		20		
Peak Repetitive Forward Current	$I_{FM}$	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



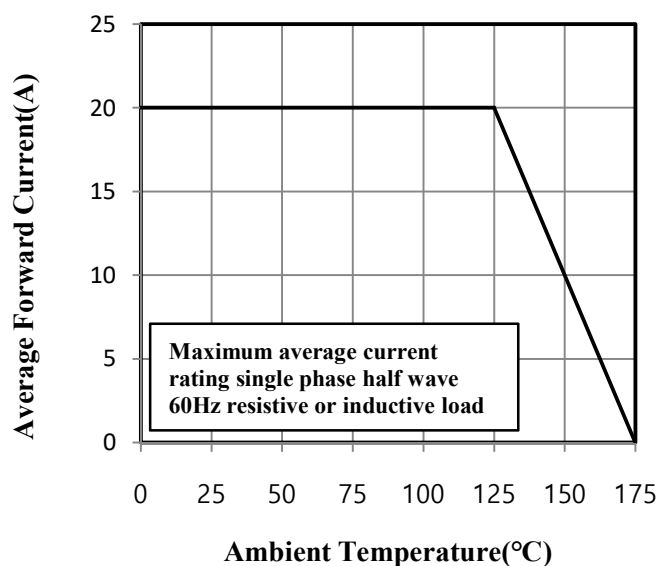
#### Equivalent Circuit



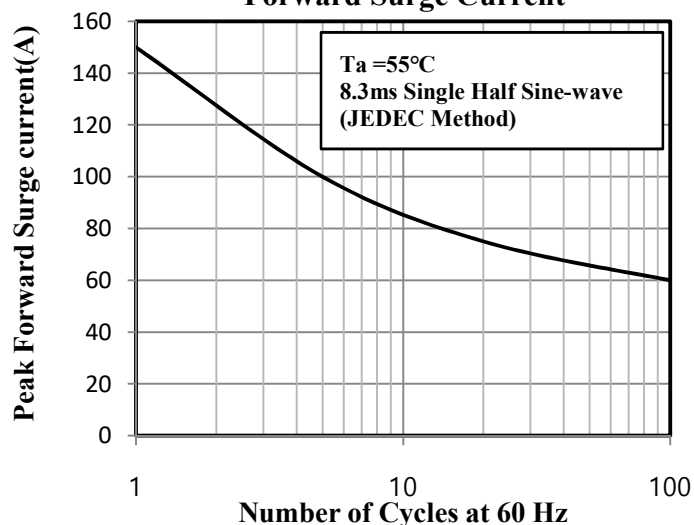


**Ratings and Characteristics Curves** ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)

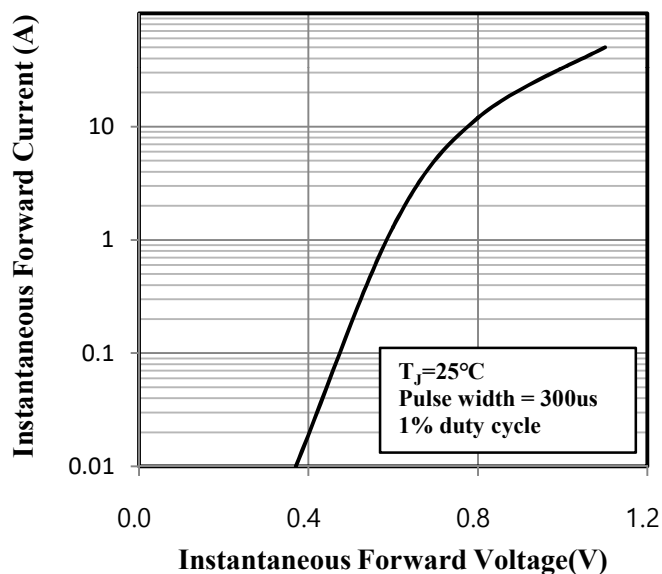
**Fig.1 Forward Current Derating Curve**



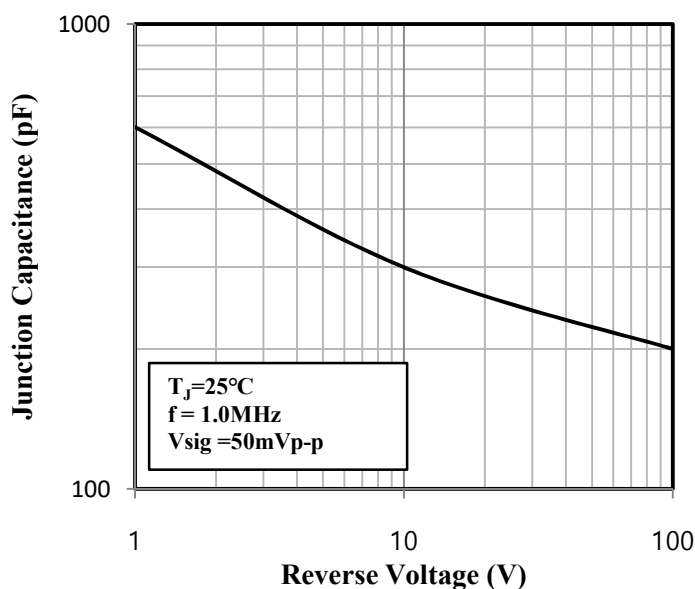
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Typical Reverse Characteristics**

