

## DATA SHEET

### SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 200 Volts

**CURRENT** 20.0Amperes

**TO-220AB**

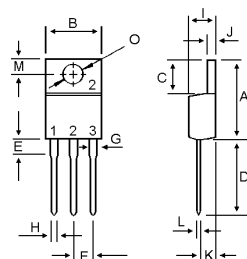
**Unit:mm**

#### FEATURES

- Metal of silicon rectifier,majority carrier conducton
- Guard-Ring for Stress Protection.
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0

#### MECHANICAL DATA

- Case : TO-220AB molded plastic
- Polarity : As marked on the body
- Mounting position : Any



DIM	MILLIMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	5.02	6.52
D	13.06	14.62
E	3.57	4.07
F	2.42	2.66
G	1.12	1.36
H	0.72	0.96
I	4.22	4.98
J	1.14	1.38
K	2.20	2.98
L	0.33	0.55
M	2.48	2.98
O	3.70	3.90



**In compliance with EU RoHs 2002/95/EC directives**

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60HZ, resistive or inductive load.  
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL			MBR20200CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM			200	V
Maximum RMS Voltage	VRMS			140	V
Maximum DC Blocking Voltage	V <sub>cc</sub>			200	V
Average Rectifier Forward Current ( per diode ) Total Device (Rated VR) @TC=125°C	IF (AV)			10 20	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	IFSM			150	A
Maximum Instantaneous Forward Voltage	IF=10A	T <sub>c</sub> =25°C T <sub>c</sub> =125°C	VF	0.95 0.85	V
Instantaneous Reverse Current	AT VRM	T <sub>c</sub> =25°C T <sub>c</sub> =125°C	IR	0.05 15	MA
Typical Thermal Resistance	R <sub>θJC</sub>			3.6	°C/W
Operating Temperature Range	T <sub>J</sub>			-55to+175	°C
Storage Temperature Range	T <sub>STG</sub>			-55to+175	°C

FIG-1 FORWARD CURRENT DERATING CURVE

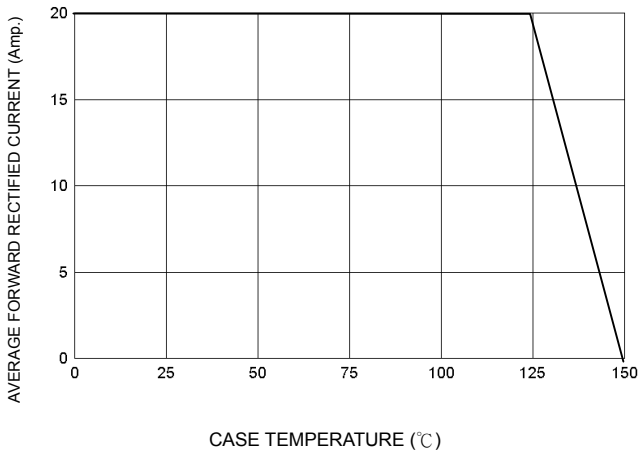


FIG-2 TYPICAL FORWARD CHARACTERISTICS

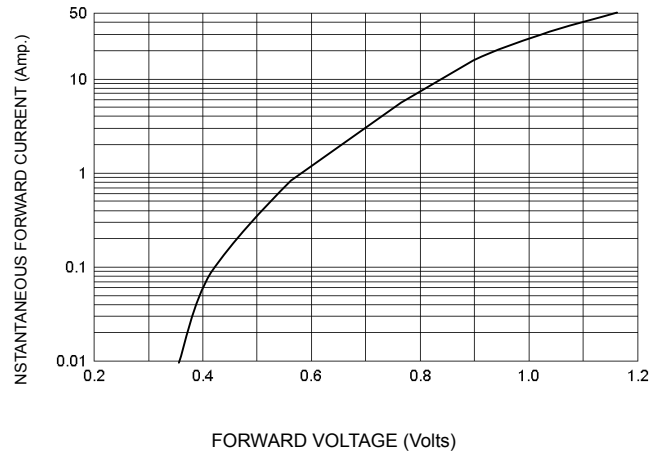


FIG-3 TYPICAL REVERSE CHARACTERISTICS

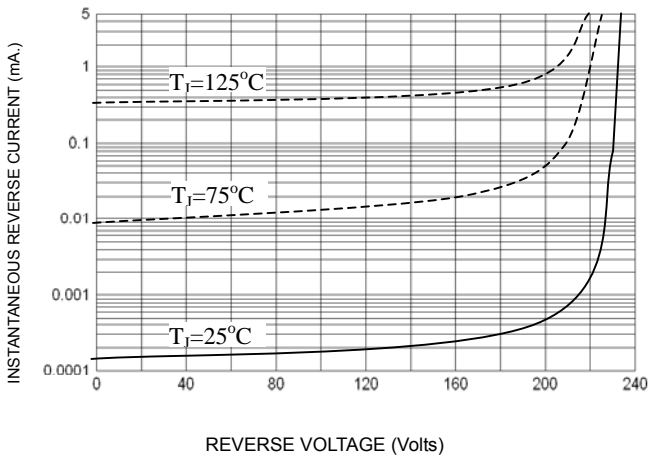


FIG-4 TYPICAL JUNCTION CAPACITANCE

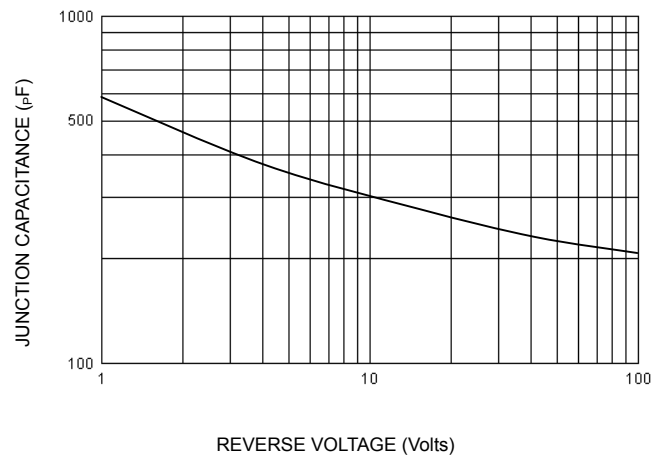


FIG-5 PEAK FORWARD SURGE CURRENT

