

## DATA SHEET

### SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 100 Volts

**CURRENT** 20.0Amperes

**TO-220AB**

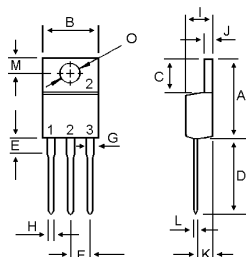
**Unit:mm**

#### 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	MBR20100CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	V
Maximum RMS Voltage	VRMS	70	V
Maximum DC Blocking Voltage	V <sub>cc</sub>	100	V
Maximum Average Forward Rectified Current	I (AV)	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	IFSM	150	A
Maximum Forward Voltage at 10A DC	VF	0.85	V
Maximum DC Reverse Current @TC=25°C at Rated DC Blocking Voltage @ TC=125 °C	IR	0.15 150	MA
Typical Thermal Resistance	R <sub>QJC</sub>	3.5	°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

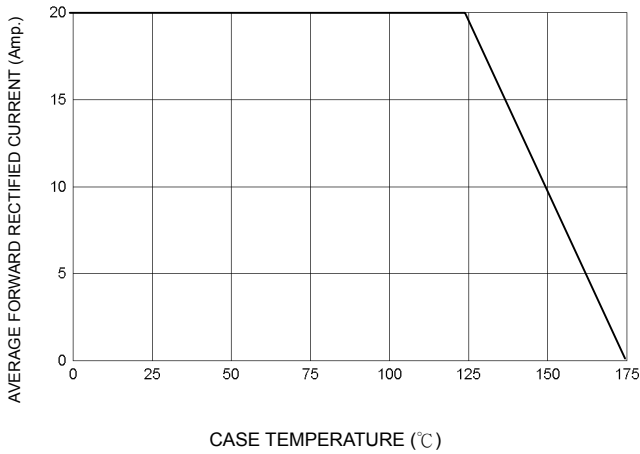


FIG-2 TYPICAL FORWARD CHARACTERISTICS

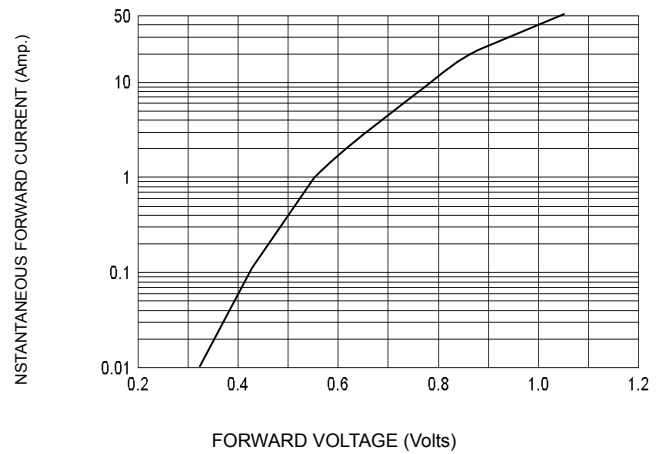


FIG-3 TYPICAL REVERSE CHARACTERISTICS

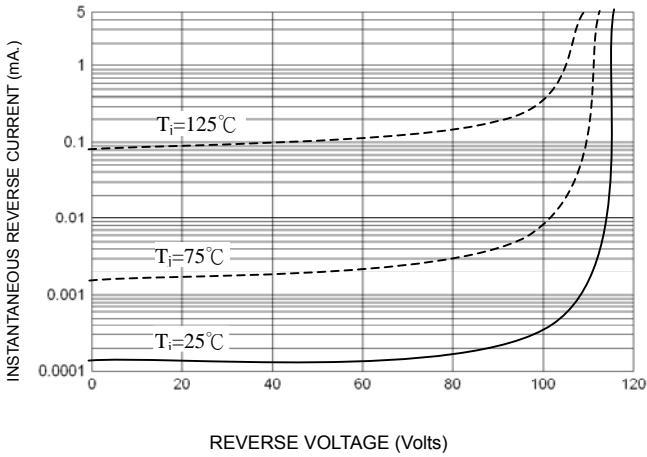


FIG-4 TYPICAL JUNCTION CAPACITANCE

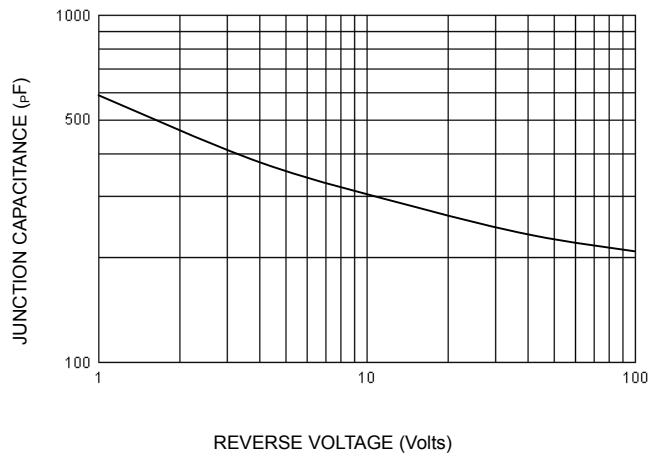


FIG-5 PEAK FORWARD SURGE CURRENT

