

DATA SHEET

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 150 Volts

CURRENT 10.0Amperes

TO-220AB

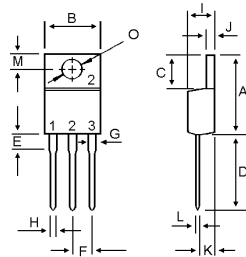
Unit:mm

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%

Characteristic	Symbol			MBR10150CT	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM			150	V
Maximum RMS Voltage	VRMS			105	V
Maximum DC Blocking Voltage	Vcc			150	V
Average Rectifier Forward Current (per diode)	IF (AV)			5	A
Total Device (Rated VR) @TC=125°C				10	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	IFSM			125	A
Maximum Instantaneous Forward Voltage	IF=5A	Tc=25°C	VF	0.92	V
		Tc=125°C		0.85	
Instantaneous Reverse Current	AT VRM	Tc=25°C	IR	0.05	MA
		Tc=125°C		15	
Typical Thermal Resistance	R0JC			3.8	°C/W
Operating Temperature Range	TJ			-55to+175	°C
Storage Temperature Range	TSTG			-55to+175	°C

FIG-1 FORWARD CURRENT DERATING CURVE

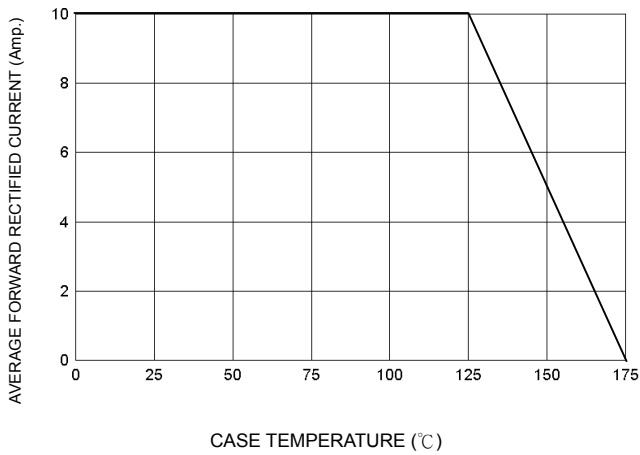


FIG-2 TYPICAL FORWARD CHARACTERISTICS

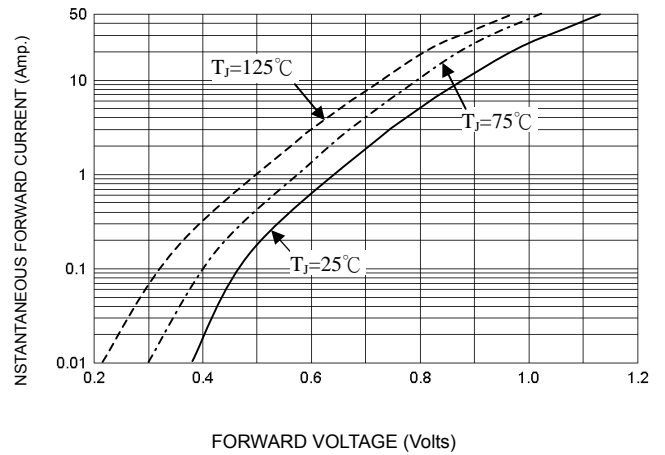


FIG-3 TYPICAL REVERSE CHARACTERISTICS

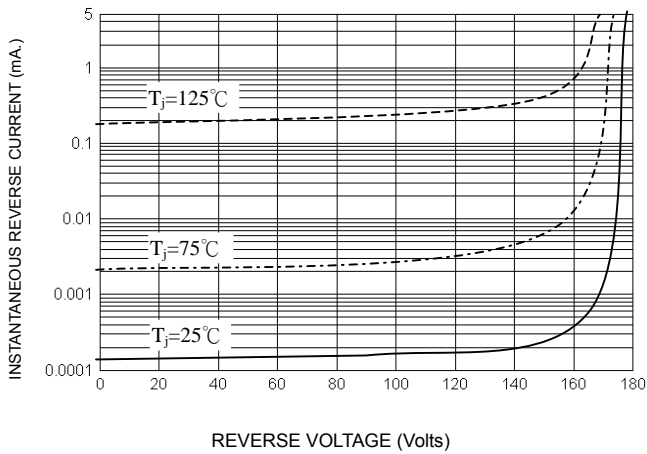


FIG-4 TYPICAL JUNCTION CAPACITANCE

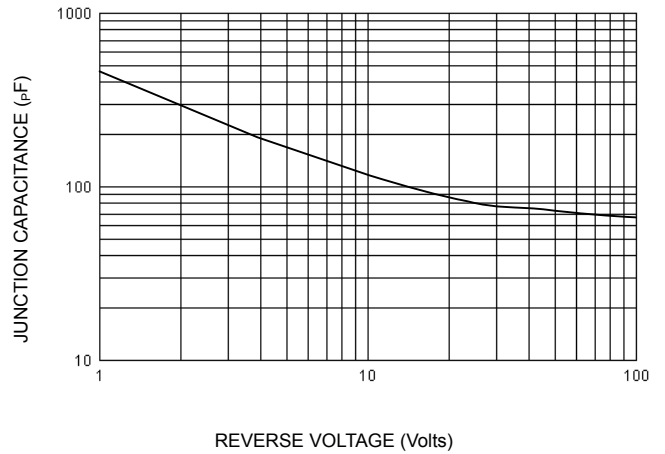


FIG-5 PEAK FORWARD SURGE CURRENT

