

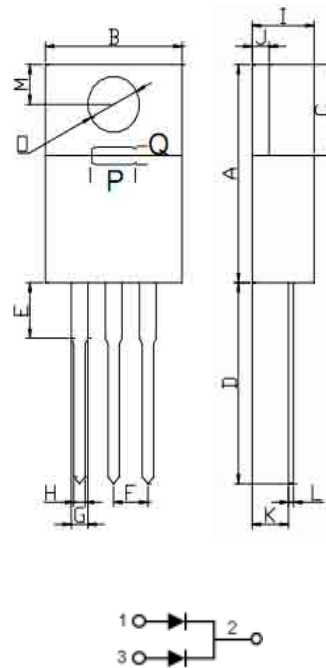
**FEATURES**

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient 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 : T0-220 molded plastic
- Polarity : As marked on the body
- Mounting position : Any

TO-220 PACKAGE



DIM	MILLIMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	6.01	6.52
D	13.06	14.62
E	3.57	4.07
F	2.42	2.66
G	1.12	1.35
H	0.72	0.96
I	4.22	4.98
J	1.14	1.36
K	2.20	2.97
L	0.33	0.55
M	2.48	2.98
O	3.70	3.90
P	3.50	3.70
Q	1.20	1.40

**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%

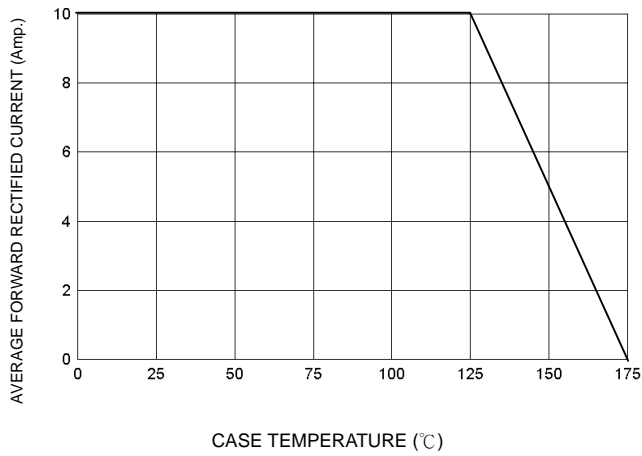


**Lead Free**

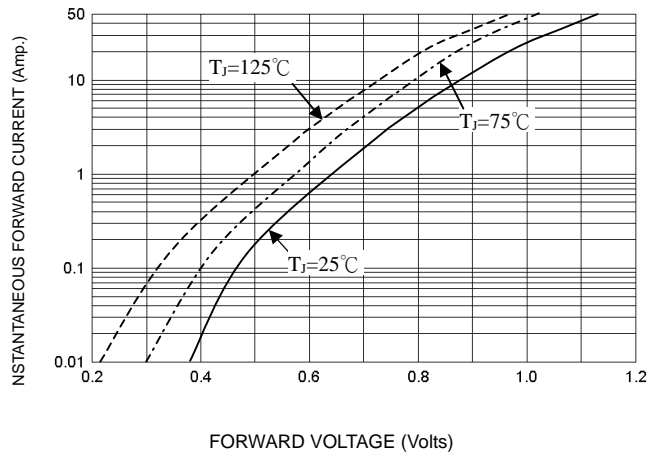
CHARACTERISTICS	SYMBOL			MBR10150CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM			150	V
Maximum RMS Voltage	VRMS			105	V
Maximum DC Blocking Voltage	Vcc			150	V
Average Rectifier Forward Current ( per diode ) Total Device (Rated VR) @TC=125°C	IF(AV)			5 10	A
Non-Repetitive Peak Surge Current (Surge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

**RATINGS AND CHARACTERISTIC CURVES**

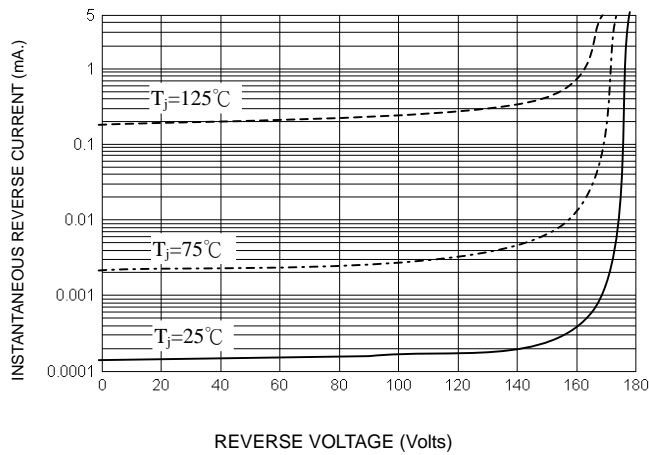
**FIG-1 FORWARD CURRENT DERATING CURVE**



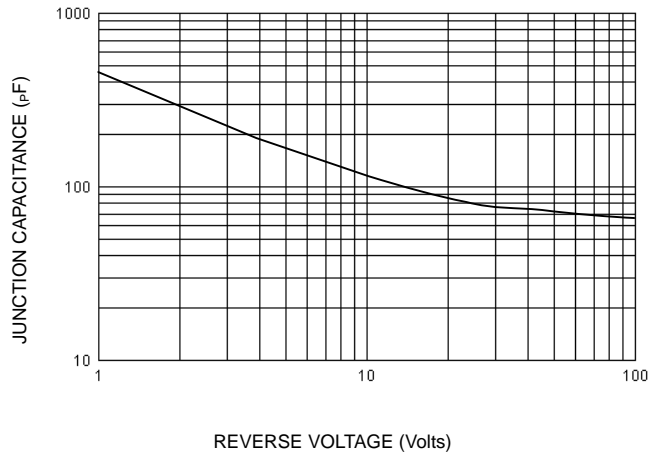
**FIG-2 TYPICAL FORWARD CHARACTERISTICS**



**FIG-3 TYPICAL REVERSE CHARACTERISTICS**



**FIG-4 TYPICAL JUNCTION CAPACITANCE**



**FIG-5 PEAK FORWARD SURGE CURRENT**

