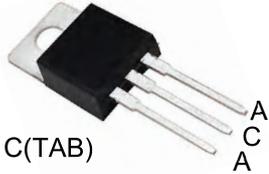
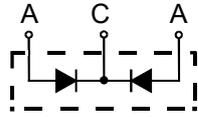


MBR1070CT thru MBR10100CT

High Tjm Low IRRM Schottky Barrier Diodes

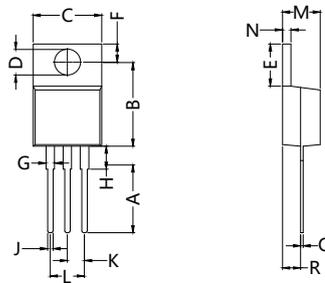


C(TAB)



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-220AB



Dim.	Millimeter	
	Min.	Max.
A	12.70	13.97
B	14.73	16.00
C	9.91	10.66
∅D	3.54	4.08
E	5.85	6.85
F	2.54	3.18
G	1.15	1.65
H	2.79	5.84
J	0.64	1.01
K	2.45BSC	
L	5.05BSC	
M	4.32	4.82
N	1.14	1.39
Q	0.35	0.56
R	2.29	2.79



	VRRM V	VRMS V	VDC V
MBR1070CT	70	49	70
MBR1080CT	80	56	80
MBR1090CT	90	63	90
MBR10100CT	100	70	100

Symbol	Characteristics	Maximum Ratings	Unit
I(AV)	Maximum Average Forward Rectified Current @Tc=100°C	10	A
IFSM	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	120	A
dv/dt	Voltage Rate Of Change (Rated VR)	10000	V/us
VF	Maximum Forward Voltage (Note 1) IF=5A @TJ=25°C IF=5A @TJ=125°C IF=10A @TJ=25°C IF=10A @TJ=125°C	0.85 0.75 0.95 0.85	V
IR	Maximum DC Reverse Current At Rated DC Blocking Voltage @TJ=25°C @TJ=125°C	0.1 15	mA
RθJC	Typical Thermal Resistance (Note 2)	3.0	°C/W
CJ	Typical Junction Capacitance Per Element (Note 3)	300	pF
TJ	Operating Temperature Range	-55 to +150	°C
TSTG	Storage Temperature Range	-55 to +175	°C

NOTES: 1. 300us Pulse Width, Duty Cycle 2%.
2. Thermal Resistance Junction To Case.
3. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.

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
- *For use in low voltage, high frequency inverters, free whelling, and polarity protection applications
- *RoHS compliance

MECHANICAL DATA

- *Case: TO-220AB molded plastic
- *Polarity: As marked on the body
- *Weight: 2 grams
- *Mounting position: Any



MBR1070CT thru MBR10100CT

High T_{jm} Low IRRM Schottky Barrier Diodes

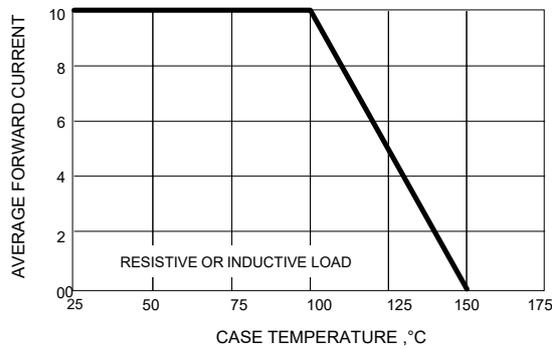


FIG.1 - FORWARD CURRENT DERATING CURVE

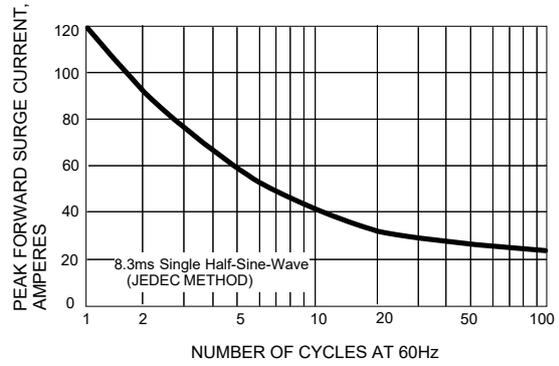


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

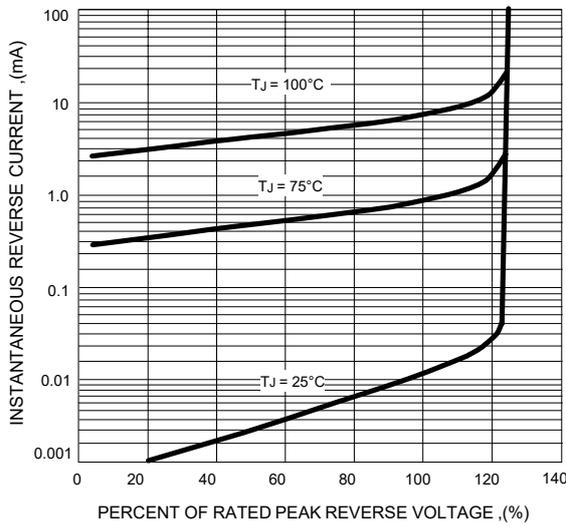


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

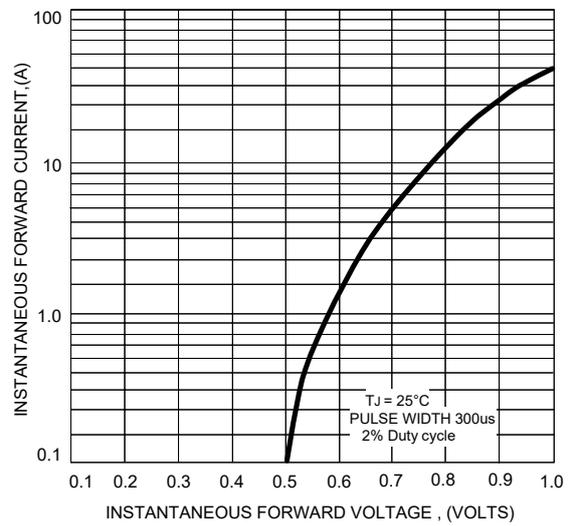


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

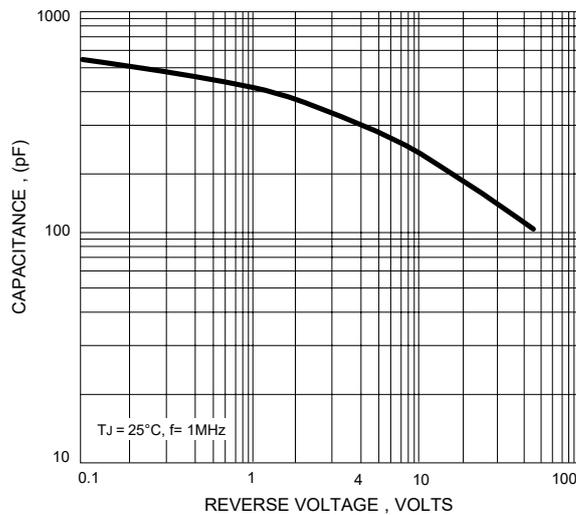
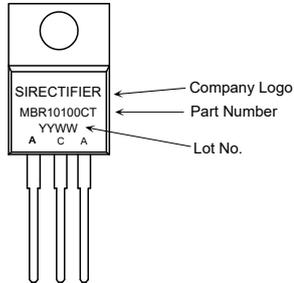


FIG.5 - TYPICAL JUNCTION CAPACITANCE

MBR1070CT thru MBR10100CT

High Tjm Low IRRM Schottky Barrier Diodes

Marking



Ordering Information

Part Number	Package	Shipping	Marking Code
MBR1070CT	TO-220AB	50pcs / Tube	MBR1070CT
MBR10100CT	TO-220AB	50pcs / Tube	MBR10100CT