



Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

MBR16100CT

16 Amp Schottky Barrier Rectifier 100 Volts

Features

- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

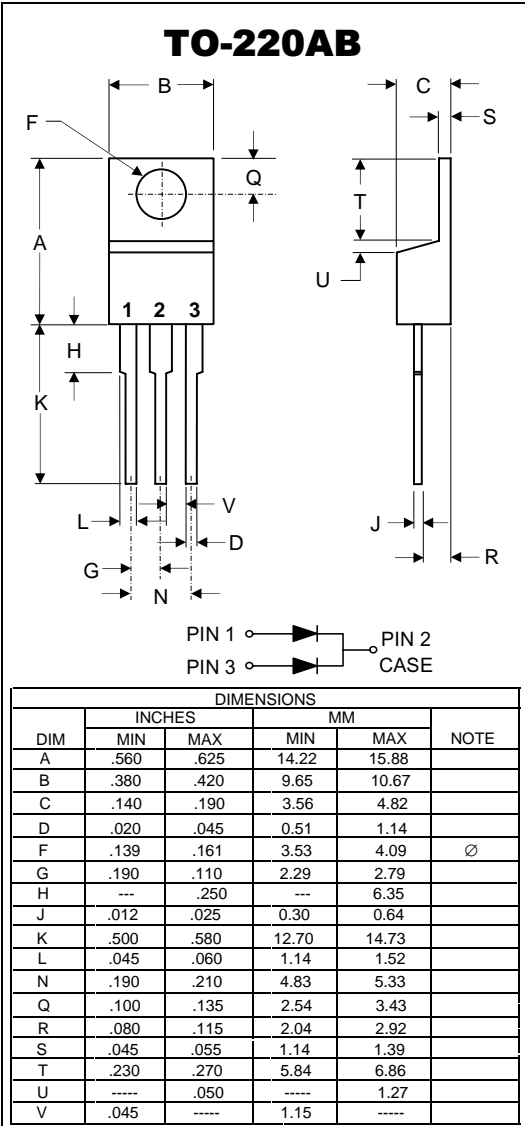
- Operating Temperature :-50°C to +150°C
- Storage Temperature: - 50°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR16100CT	MBR16100CT	100 V	70V	100 V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	125A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	.85V .75V	$I_{FM} = 8A$ $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	0.1mA 100mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	275pF	Measured at 1.0MHz, $V_R=4.0V$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

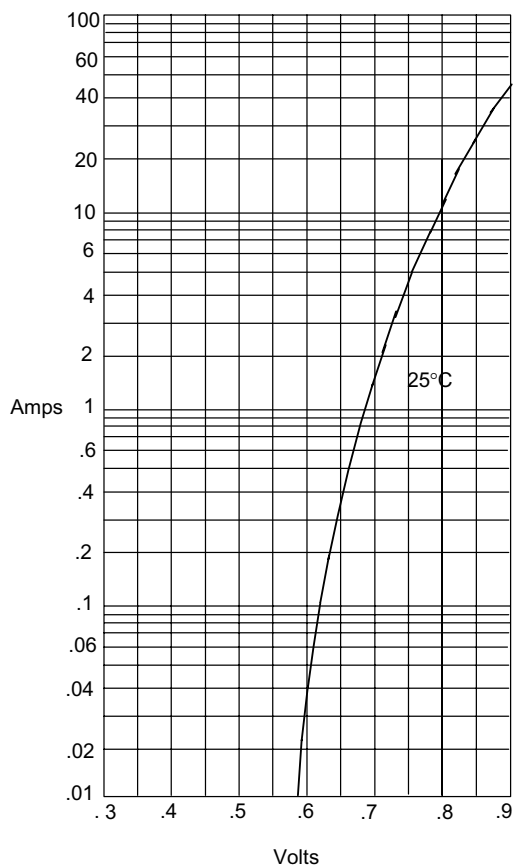




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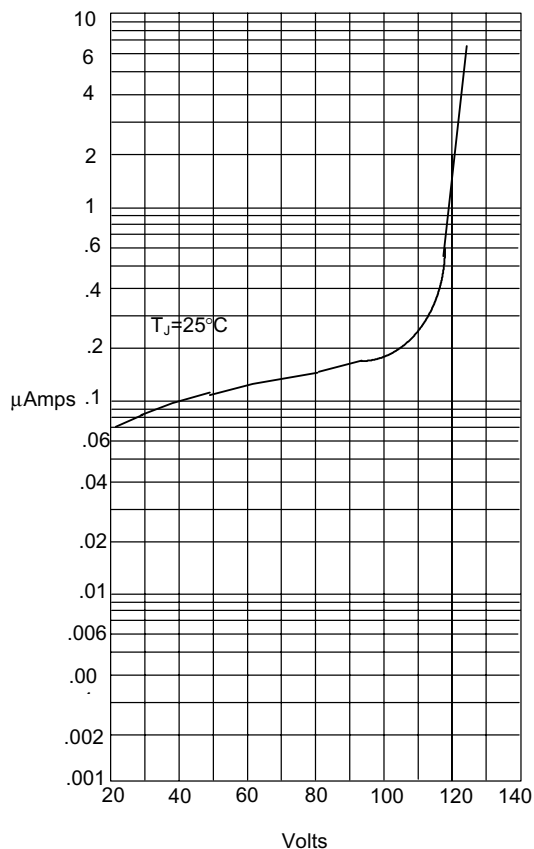
MBR16100CT

Figure 1
Typical Forward Characteristics



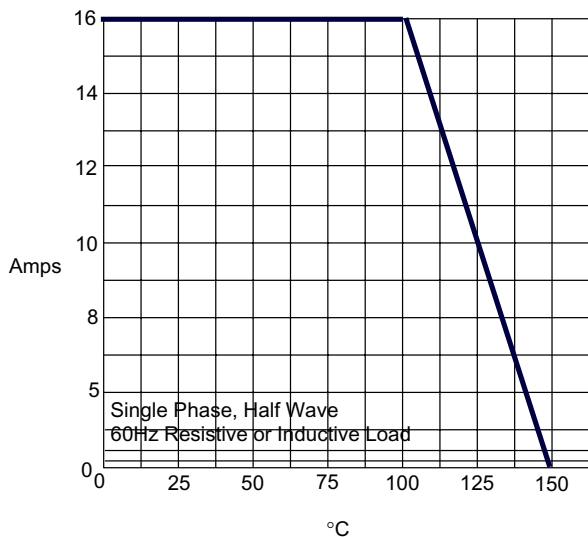
Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



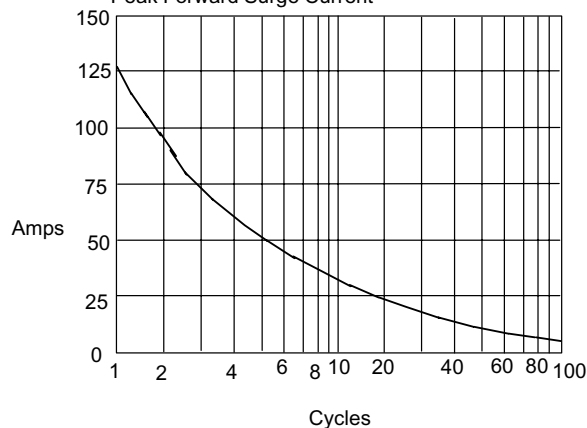
Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus* Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles