

20A Schottky Barrier Rectifiers

Features

- Low forward voltage
- Low switching noise
- High current capacity
- Guarantee reverse avalanche
- Guard-ring for stress protection
- Lower power loss & high efficiency
- 175° C operating junction temperature
- Low stored charge majority carrier conduction
- Plastic material used carrier underwriters laboratory
- RoHS compliant



TO-220



Mechanical Data

Case:	JEDEC TO-220, molded plastic body
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
Polarity	As marked
Mounting Position:	Any
Mounting Torque:	10 in-lbs maximum
Weight:	0.08 ounces, 2.24 grams

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MBR20200CT	Unit	Conditions
VRRM	Maximum Repetitive Peak Reverse Voltage	200	V	
VRWM	Maximum Working Peak Reverse Voltage	200	V	
VR	Maximum DC Blocking Voltage	200	V	
VR (RMS)	RMS Reverse Voltage	140	V	
IF(AV)	Maximum Average Forward Rectified Current	10	A	Per diode at $T_c=125^{\circ}\text{C}$
		20		Total device (Rated V_R) at $T_c=125^{\circ}\text{C}$
IFSM	Non-Repetitive Peak Forward Surge Current	150	A	Surge applied at rate load conditions half-wave, single phase, 60HZ

20A Schottky Barrier Rectifiers

MBR20200CT

Symbol	Description	MBR20200CT	Unit	Conditions
IFM	Peak Repetitive Forward Current	20	A	Rated V_R , square wave, 20KHZ
TJ	Operating Junction Temperature Range	-65 to +175	°C	
TSTG	Storage Temperature Range			

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	MBR20200CT	Unit	Conditions
VF	Maximum Instantaneous Forward Voltage per Diode	0.95	V	IF=10A, Tc=25 °C
		0.85		IF=10A, Tc=125 °C
IR	Maximum Instantaneous Reverse Current	0.01	mA	Rated DC Voltage, Tc=25 °C
		10		Rated DC Voltage, Tc=125°C
Rθ-JC	Typical Thermal junction to case	3.8	°C/W	

Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

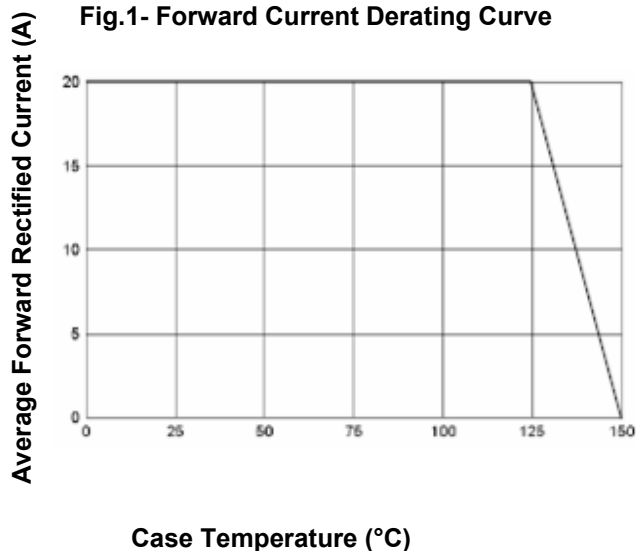
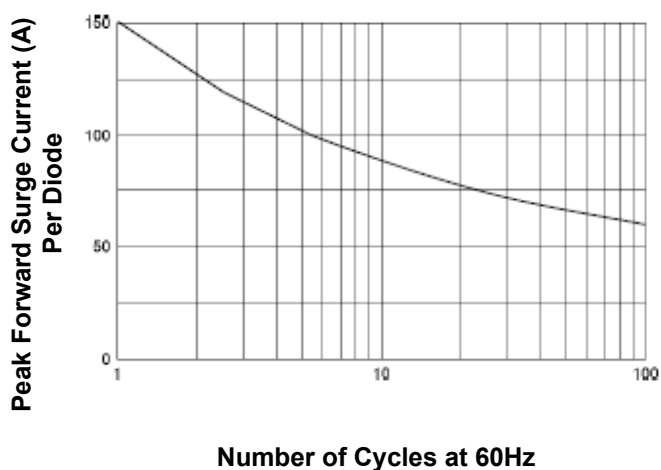


Fig.2- Peak Forward Surge Current



20A Schottky Barrier Rectifiers

MBR20200CT

Fig.3- Typical Instantaneous Forward Characteristics

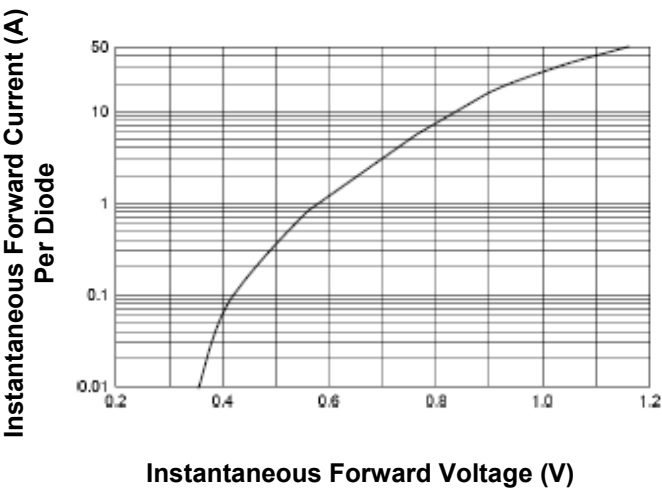


Fig.4- Typical Reverse Characteristics

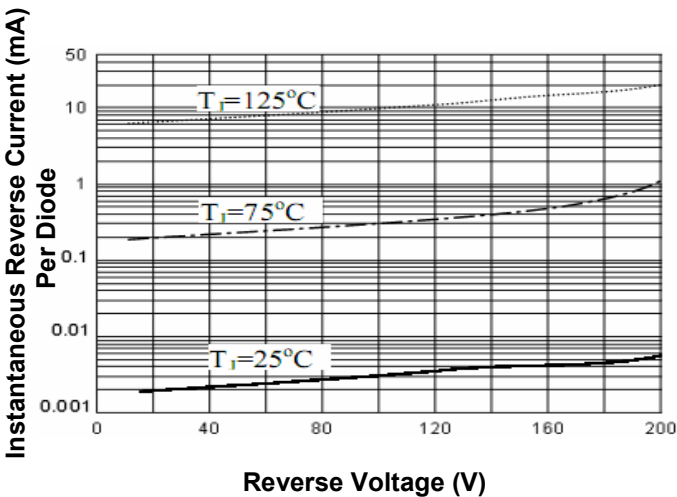
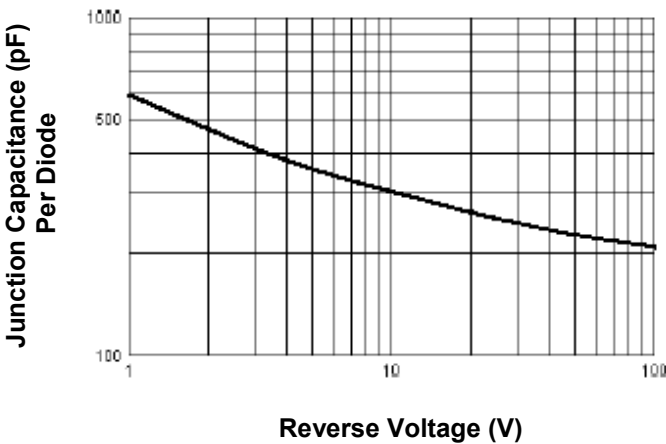


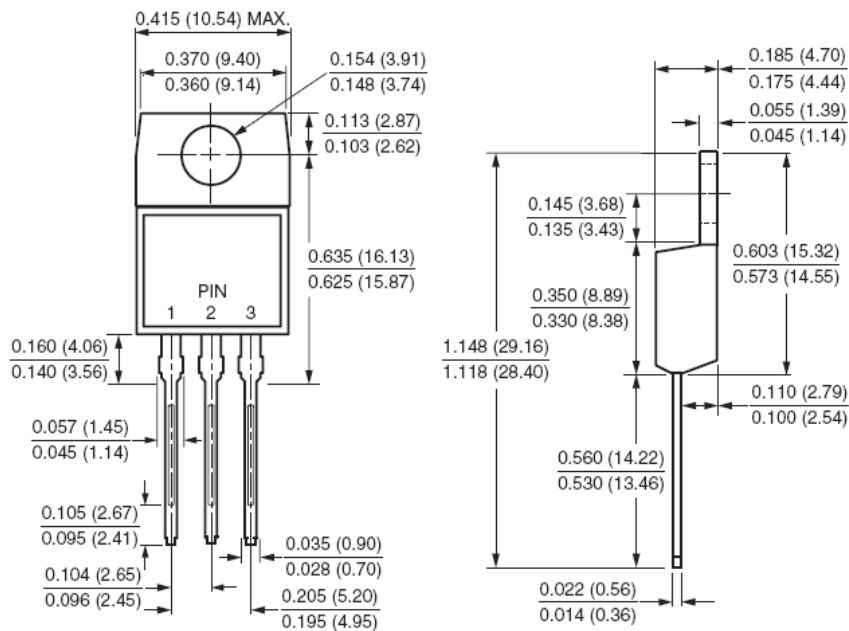
Fig.5- Typical Junction Capacitance



20A Schottky Barrier Rectifiers

MBR20200CT

Dimensions in inches (mm)



TO-220

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931