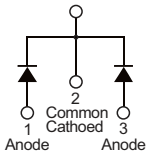
MBR20100F

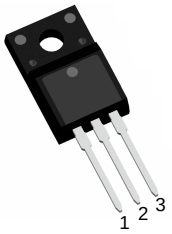
20A SCHOTTKY BARRIER RECTIFIER

■ PRODUCT CHARACTERISTICS

VR(@IC=0.5mA)	100V
VF(Typ@IF=10A)	0.8V
IR(@VR=100V)	0.05mA
ID	20A

Symbol





TO-220F

■ MECHANICAL CHARACTERISTICS

- Case: epoxy,molded
- Finish:all external surfaces corrosion resistant and terminal
- Leads are readily solderable
- Leads temperature for soldering purposes: 260℃ Max for 10 seconds

■ FEATURES

- Low forward voltage
- Low power loss/high efficiency
- Low stored charge majority carrier conduction
- Pb free package are available

■ ORDER INFORMATION

Order codes		Package	Packing
Halogen-free	Halogen		
N/A	MBR20100F	TO-220F	50pieces/Tube

■ MAXIMUM RATINGS (Each diode leg)

Parameter		Symbol	Value	Unit
Peak repetitive reverse voltage		V_{RRM}	100	V
Average rectified output current	Total	I_O	20	A
	Per leg		10	A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on reate load		I_{FSM}	150	A
Operating and storage temperature range		T_J, T_{STG}	-55 to + 175	℃

■ ELECTRICAL CHARACTERISTICS(T_A=25℃ Unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Peak repetitive reverse voltage	B_V	I_C=0.5mA, T_J=25℃	100	-	-	V
Forward voltage drop	V_F	I_F=10A, T_J=25℃	-	0.8	0.85	V
Leakage current	I_R	V_R=100V, T_J=25℃	-	-	0.05	mA
		V_R=100V, T_J=125℃	-	-	20	
Typical thermal resistance per diode	$R_{\theta J-C}$		-	4	-	℃/W

■ TYPICAL CHARACTERISTICS

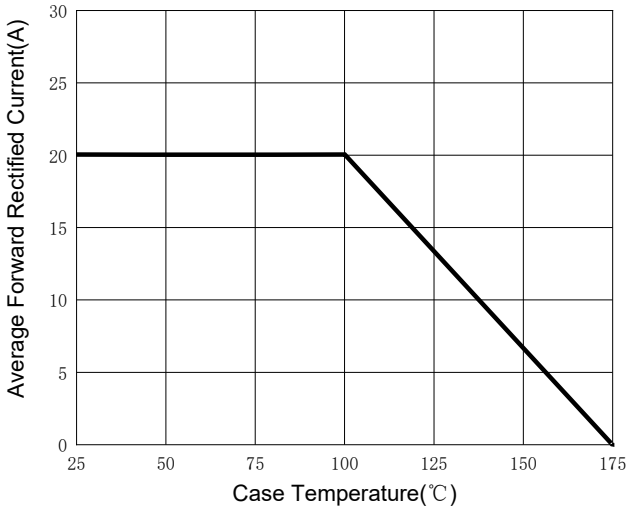


Fig.1:Forward Current Derating Curve

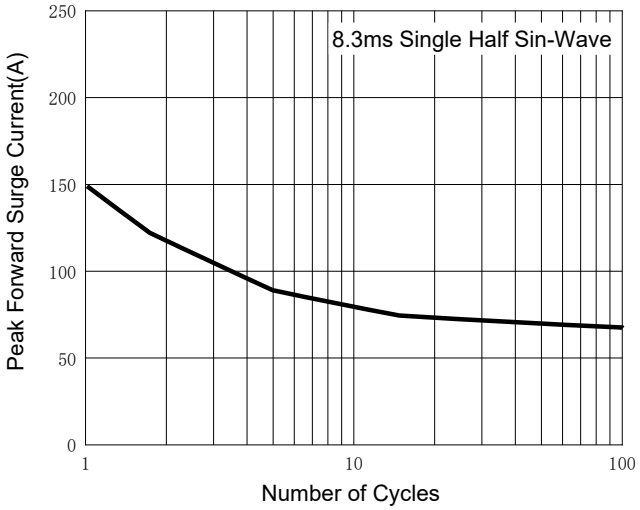


Fig.2: Forward Surge Current Capability(Per Diode)

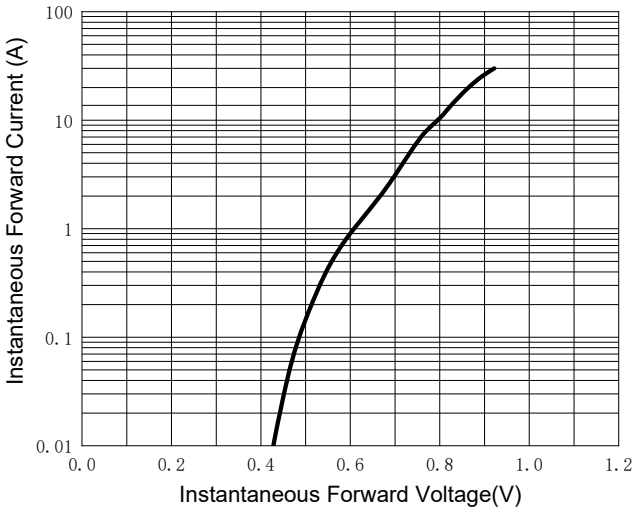


Fig.3:Typical Instantaneous Forward Characteristics(Per Diode)

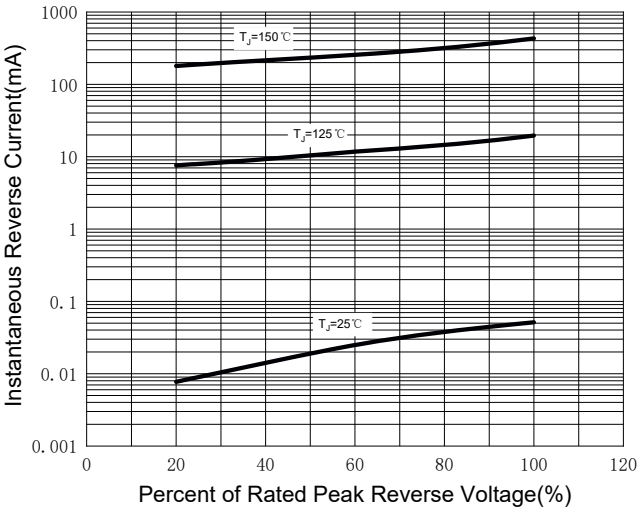


Fig.4:Typical Reverse Leakage Characteristics(Per Diode)

■ TO-220F PACKAGE OUTLINE DIMENSIONS