



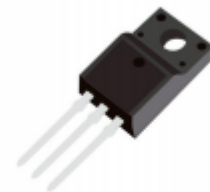
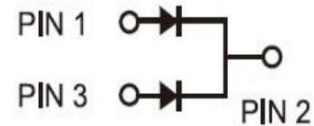
**Schottky Diodes**  
**Reverse Voltage-40to200v**  
**Forward current-20A**

**Features**

Schottky chip  
Ideal for surface mounted applications  
Low forward voltage drop, Low power loss, high efficiency  
Plastic Case Material has UL Flammability

**Mechanical Data**

Package: TO-220AB, TO-220F, TO-263  
Terminals: Tin Plated leads, solderable per  
Mil-STD-750 Method 2026  
Polarity: As marked  
Molding compound meets UL 94 V-0 flammability rating,  
ROHS-compliant



TO-220F

**Maximum Ratings (Ta=25℃ Unless otherwise**

Type Number	SYMBOL	MBRF20200CT	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Maximum RMS Voltage	$V_{RMS}$	140	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$	$I_{Q(AV)}$	20.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load (JEDEC Method) on rated	IFSM	130.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j = 25^\circ\text{C}$		260.0	A
Current squared time @1ms ≤ t ≤ 8.3ms $T_j = 25^\circ\text{C}$ , Rating of per diode	$I^2t$	70	A <sup>2</sup> S
Maximum Forward Voltage at 10.0A DC	$V_{FM}$	0.95	V
Maximum Reverse Current $T_A = 25^\circ\text{C}$	IR	0.1	mA
at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$		20	mA
Typical Junction Capacitance	CJ	300	pF
Typical Thermal Resistance TO-220AB, TO-260 TO-220F	$R_{QJC}$	2.0	$^\circ\text{C}/\text{W}$
		4.0	
Operating Junction Temperature Range	$T_J$	-55to+150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55to+150	$^\circ\text{C}$



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

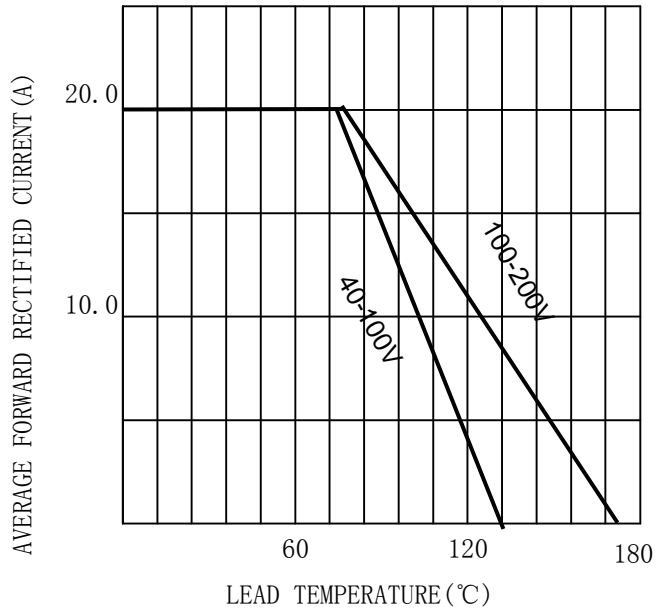


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

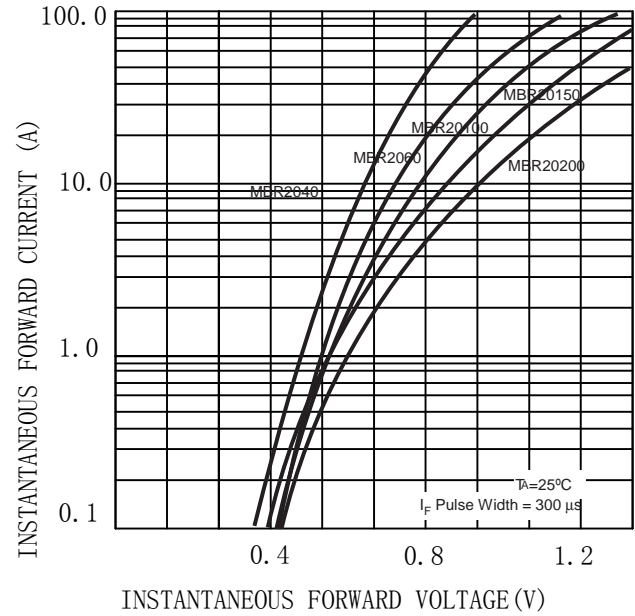


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

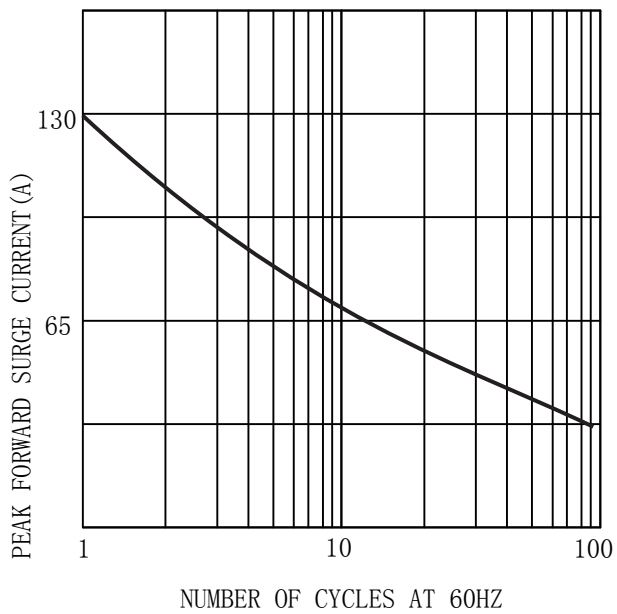
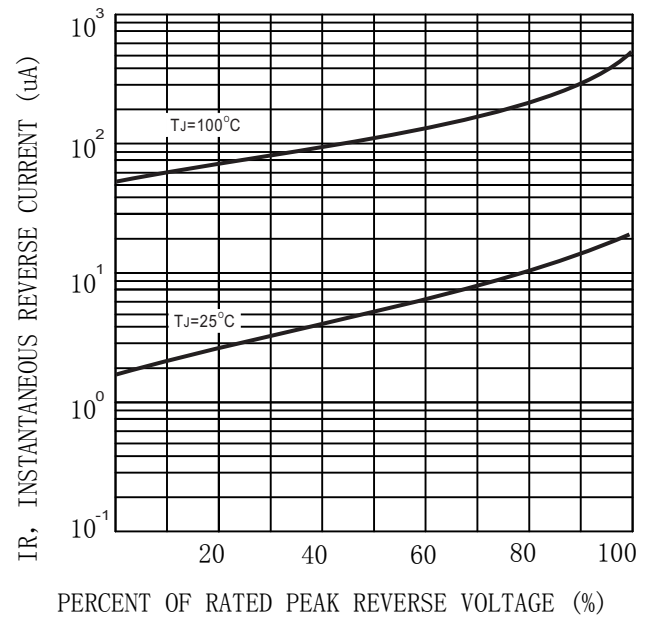


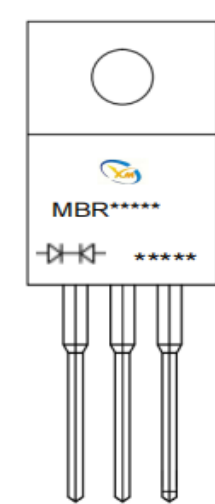
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)






## MARKING INFORMATION

TO-220F/FCT



—|—|— = Polar line

 = Logo

\*\*\*\*\* = Date Code Marking

MBR\*\*\*\*\* = Marking Code



Package Outline Dimensions millimeters

TO-220F/FCT					
DIM	INCHES		MM		NOTE
	min	max	min	max	
A	—	0.41	—	10.30	
B	0.61	0.64	15.60	16.20	
C	0.18	0.19	4.50	4.90	
D	0.26	0.28	6.60	7.00	
E	0.50	0.53	12.80	13.40	
a	0.10	0.10	2.45	2.65	
b	—	0.16	—	4.10	
c	0.03	0.04	0.72	0.92	
d	0.02	0.02	0.40	0.60	
e	—	0.15	—	3.80	Ø
f	0.09	0.11	2.40	2.80	



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