



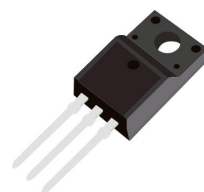
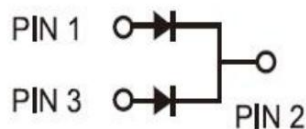
Schottky Diodes
Reverse Voltage-150 V
Forward current-20A

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-220F
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°C Unless otherwise)

Type Number	SYMBOL	MBRF20150CT	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	105	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$	$I_{O(AV)}$	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	93.4	A ² S
Maximum Forward Voltage at 10.0A DC	V_{FM}	0.9	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 Thermal Resistance Between junction and ambient Between Junction and Case	R_{QJa}	75.0	°C/W
	R_{QJC}	4.0	
Operating Junction Temperature Range	T_J	-55to+150	°C
Storage Temperature Range	T_{STG}	-55to+150	°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

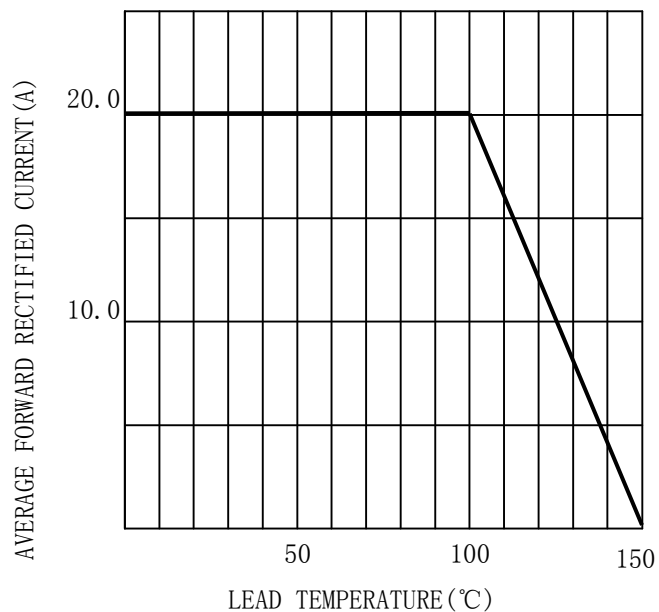


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

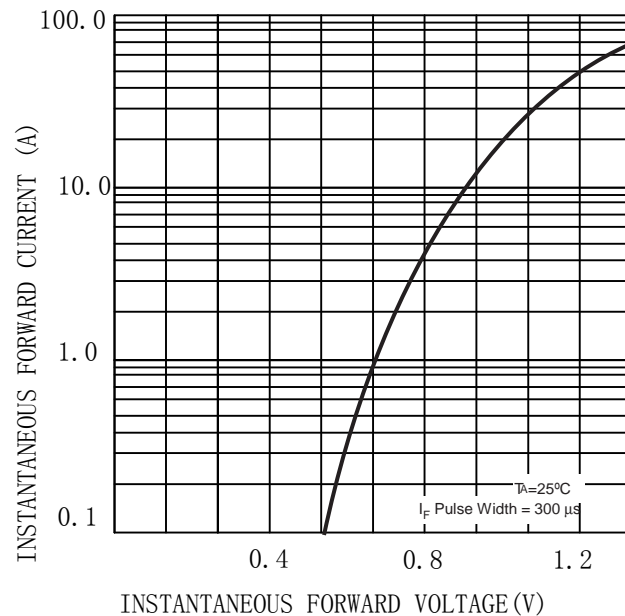


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

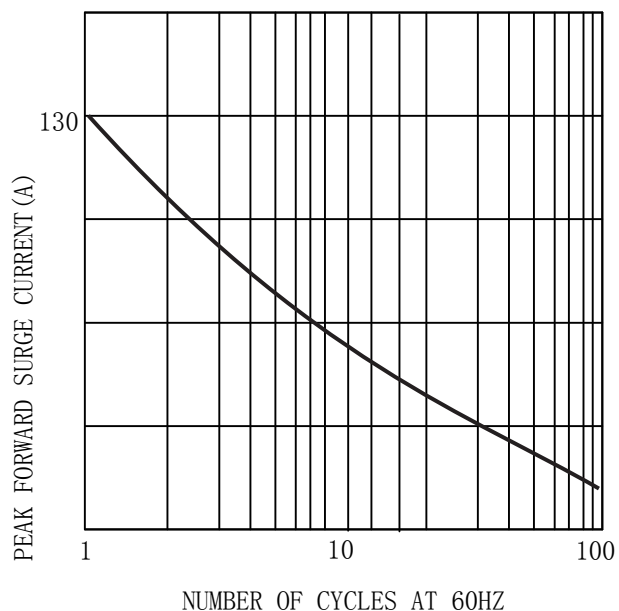
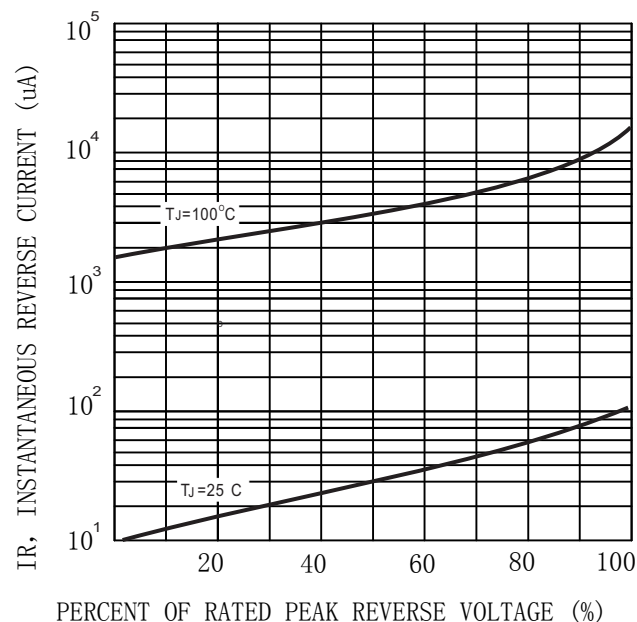


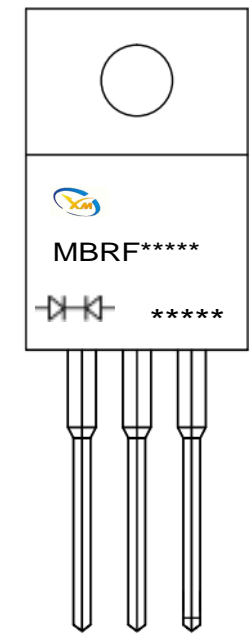
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION

TO-220F/FCT



⏏ = Polar line

XM = Logo

***** = Date Code Marking

MBRF***** = Marking Code

Package Outline Dimensions millimeters

TO-220F/FCT					
DIM	INCHES		MM		NOTE
	min	max	min	max	
A	0.403	0.41	9.86	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	0.13	0.16	3.5	4.10	
c	0.03	0.04	0.72	0.92	
d	0.02	0.02	0.40	0.60	
e	0.12	0.15	3.0	3.80	Ø
f	0.09	0.11	2.40	2.80	



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