



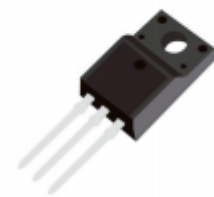
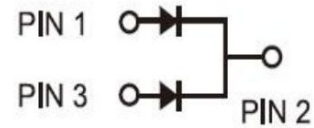
Schottky Diodes
Reverse Voltage-40to200v
Forward current-30A

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	MBRF30100CT	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$	$I_{Q(AV)}$	30.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load (JEDEC Method) on rated	IFSM	230.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j = 25^\circ\text{C}$		460.0	A
Current squared time @1ms ≤ t ≤ 8.3ms $T_j = 25^\circ\text{C}$, Rating of per diode	I^2t	219.5	A ² S
Maximum Forward Voltage at 30.0A DC	V_{FM}	0.85	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	$^\circ\text{C/W}$
		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

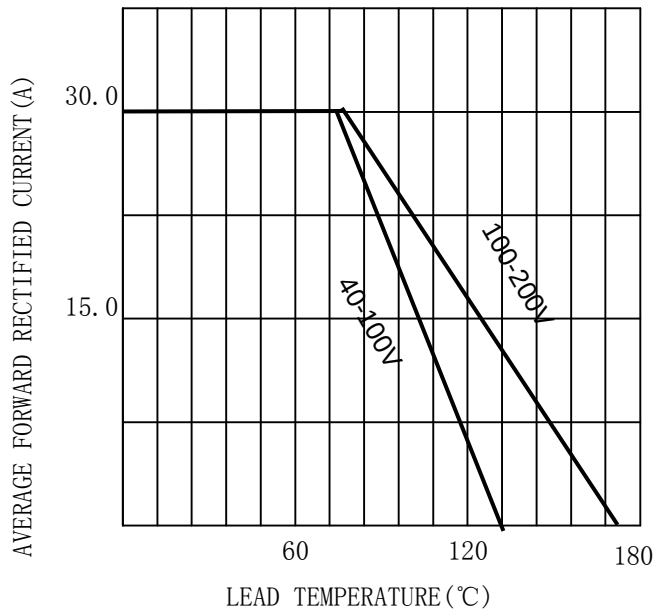


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

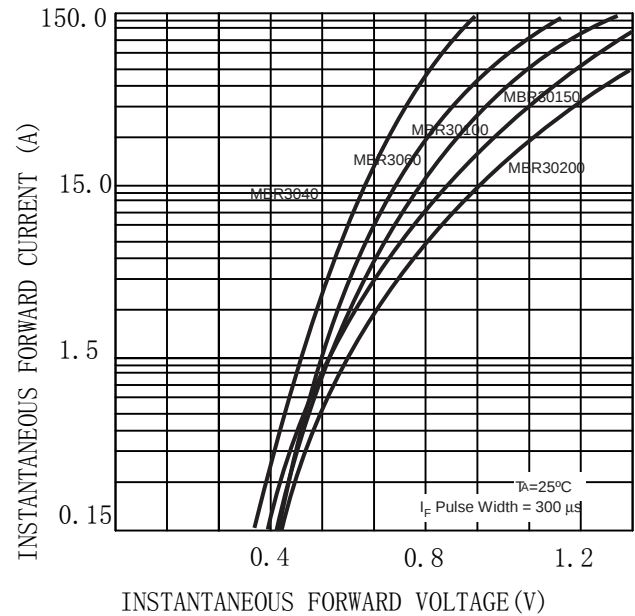


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

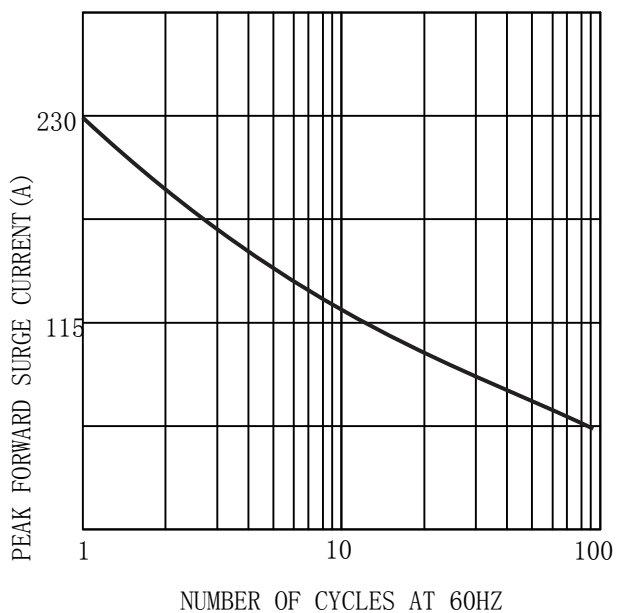
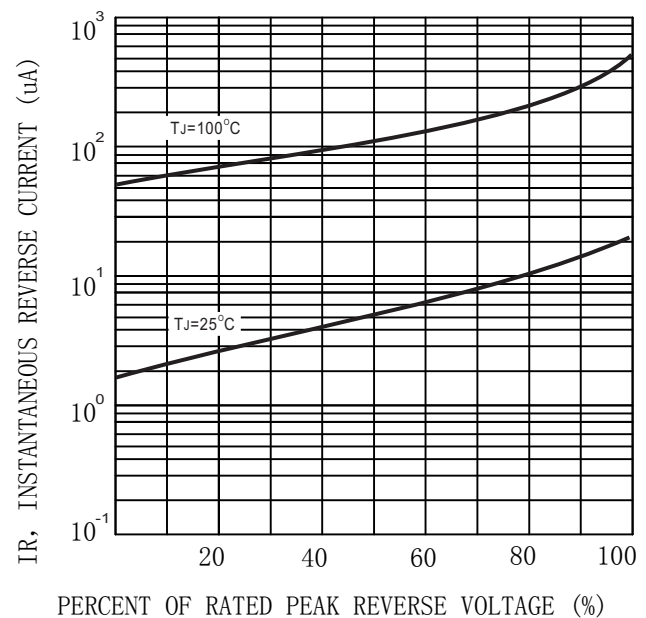


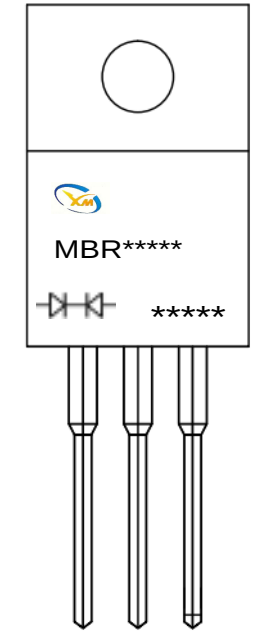
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





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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