



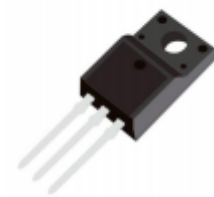
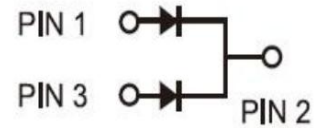
Schottky Diodes
Reverse Voltage-40to200v
Forward current-30A

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	MBRF30150CT	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 $T_L = 100^\circ\text{C}$	$I_{Q(AV)}$	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 15.0A DC	V_{FM}	0.90	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

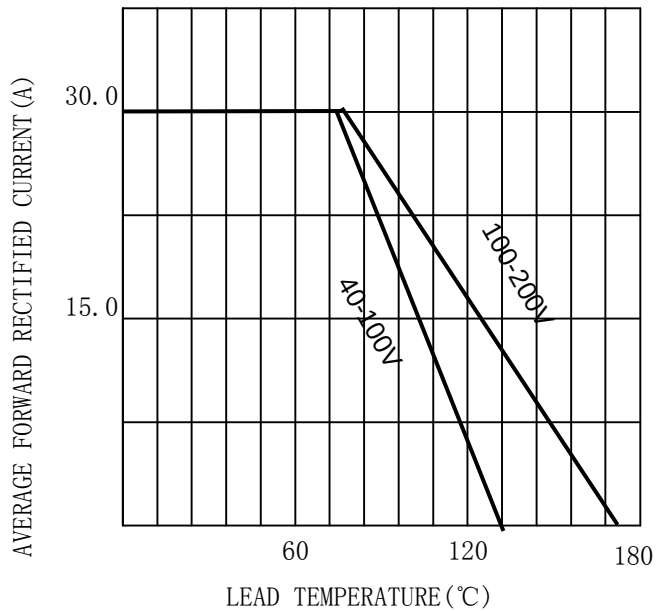


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

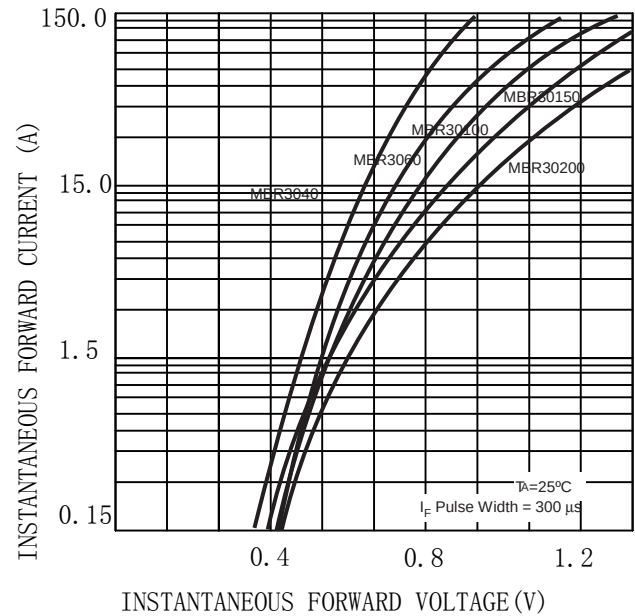


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

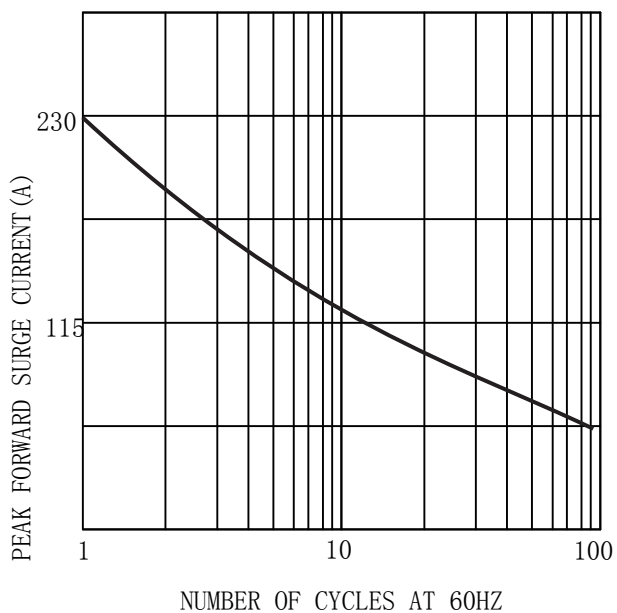
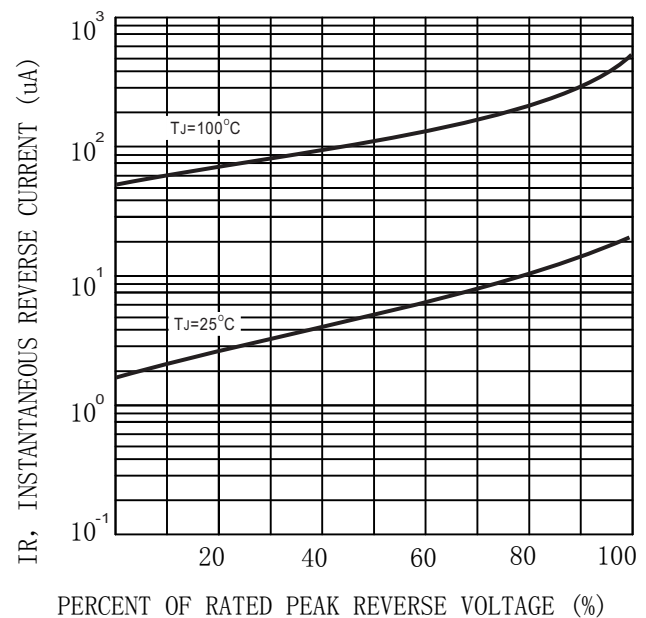


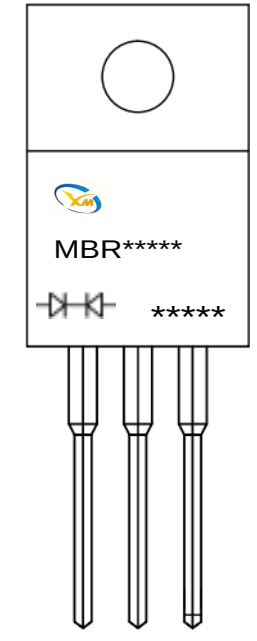
FIG. 4 TYPICAL REVERSE CHARACTERISTICS(per element)





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	



Important Statements and disclaimers.

Do not copy or modify file information without permission.

Xumao Micro reserves the right to modify this document and its products.

Specifications are available without prior notice. Customer shall obtain and confirm the latest product information and specifications prior to final design, purchase or use.

Xumao Micro does not assume any implied warranties, including warranties of fitness for special purposes, non-infringement and merchantability.

The products shown here are not designed and licensed for demanding equipment at a level of reliability or for human life and any life-saving related applications or life-sustaining, such as medical devices, transportation equipment, aerospace machinery, and so on. Customers who use or sell these products for such applications do so at their own risk.

As Xumao Micro uses batch number as tracking benchmark, please provide batch number for tracking in case of exception.