



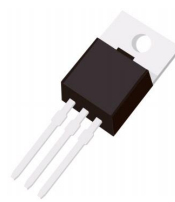
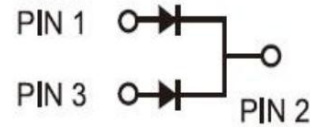
Schottky Diodes
Reverse Voltage-40to200v
Forward current-20A

Features

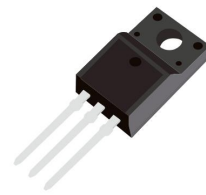
- Schottky chip
- Low forward voltage drop
- Ideal for surface mounted applications
- Low power loss, high efficiency
- Plastic Case Material has UL Flammability

Mechanical Data

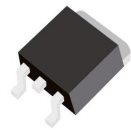
- Package: TO-220AB, TO-220F, TO-263
- Terminals: Tin Plated leads, solderable per Mil-STD-750 Method 2026
- Polarity: As marked
- Molding compound meets UL 94 V-0 flammability rating, ROHS-compliant



TO-220AB



TO-220F



TO-263

Maximum Ratings (Ta=25°C Unless otherwise)

Type Number	SYMBOL	MBRL 2040	MBRL 2060	MBRL 20100	MBRL 20150	MBRL 20200	Umit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	100	150	200	V
Maximum Average Forward Rectified Current at TL = 100°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, Tj=25°C		260.0					A
Current squared time @1ms≤t8.3≤ms Tj=25°C, Rating of per diode	I^2t	70					A ² S
Maximum Forward Voltage at 10.0A DC	V_{FM}	0.55	0.65	0.75	0.85	0.9	V
Maximum Reverse Current TA = 25°C	IR	0.2			0.1		mA
at Rated DC Blocking Voltage TA = 100°C		50			20		mA
Typical Junction Capacitance	CJ	400			300		pF
Typical Thermal Resistance TO-220AB, TO-263	R _{QJA}	2.0					°C/W
TO-220F		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

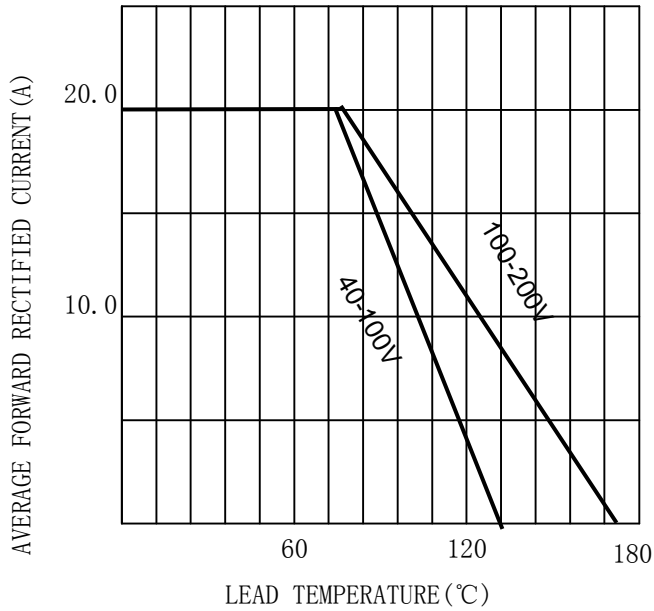


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

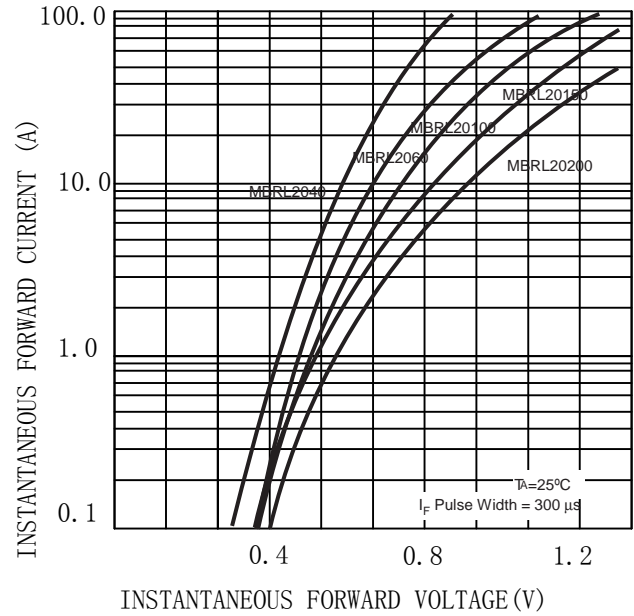


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

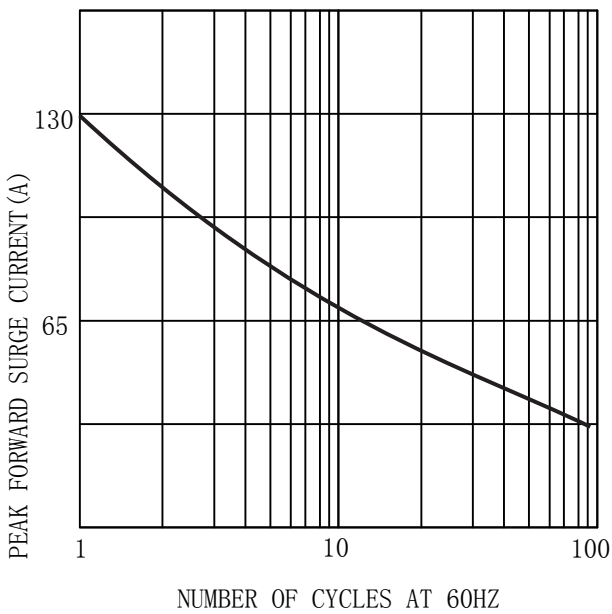
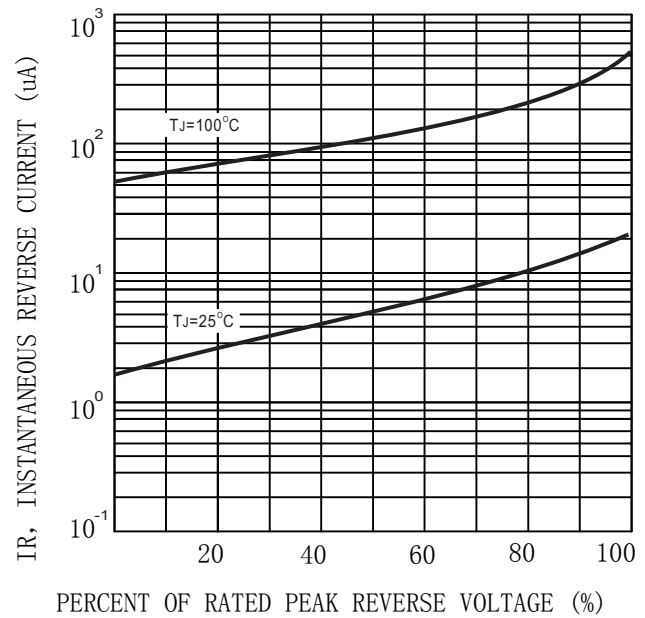


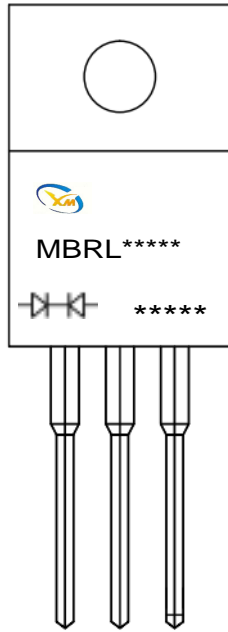
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)







MARKING INFORMATION

TO-220AB/CT



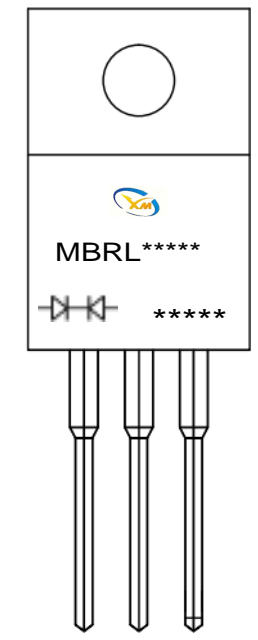
 = Polar line


 = Logo


***** = Date Code Marking

MBRL***** = Marking Code

TO-220F/FCT



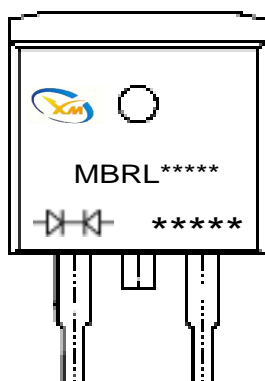
 = Polar line


 = Logo


***** = Date Code Marking

MBRL***** = Marking Code

TO-263/CS



 = Polar line

 = Logo

***** = Date Code Marking

MBRL***** = Marking Code



Package Outline Dimensions millimeters

TO-220AB/CT					
DIM	INCHES		MM		NOTE
	min	max	min	max	
A	—	0.41	—	10.30	
B	0.33	0.34	8.30	8.70	
C	0.18	0.19	4.50	4.90	
D	0.57	0.60	14.60	15.20	
E	0.53	0.56	13.50	14.10	
a	0.10	0.10	2.45	2.65	
b	—	0.16	—	4.10	
c	0.03	0.04	0.72	0.92	
d	0.01	0.02	0.30	0.50	
e	—	0.15	—	3.80	∅
f	0.05	0.06	1.20	1.40	

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	∅
f	0.09	0.11	2.40	2.80	

TO-263/CS					
DIM	INCHES		MM		NOTE
	min	max	min	max	
A	—	0.41	—	10.30	
B	0.33	0.34	8.30	8.70	
C	0.18	0.19	4.50	4.90	
D	0.38	0.39	9.60	10.00	
E	0.21	0.22	5.30	5.70	
a	0.10	0.10	2.45	2.65	
b	—	0.16	—	4.10	
c	0.03	0.04	0.72	0.92	
d	0.01	0.02	0.30	0.50	
e	0.05	0.06	1.20	1.40	



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.