



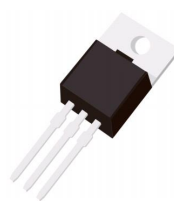
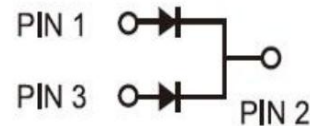
Schottky Diodes
Reverse Voltage-40to200v
Forward current-40A

Features

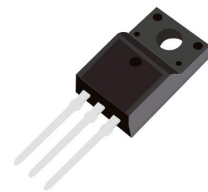
Schottky chip
Low forward voltage drop
Ideal for surface mounted applications
Low power loss, high efficiency
Plastic Case Material has UL Flammability

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	MBR 40L40	MBR 40L60	MBR 40L100	MBR 40L150	MBR 40L200	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	IO(AV)	40.0					A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	300.0					A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		600.0					A
Current squared time @1ms≤t8.3≤ms Tj=25°C, Rating of per diode	I²t	373.5					A²S
Maximum Forward Voltage at 20.0A 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-260 TO-220F	R _{QJC}	2.0					°C/W
		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

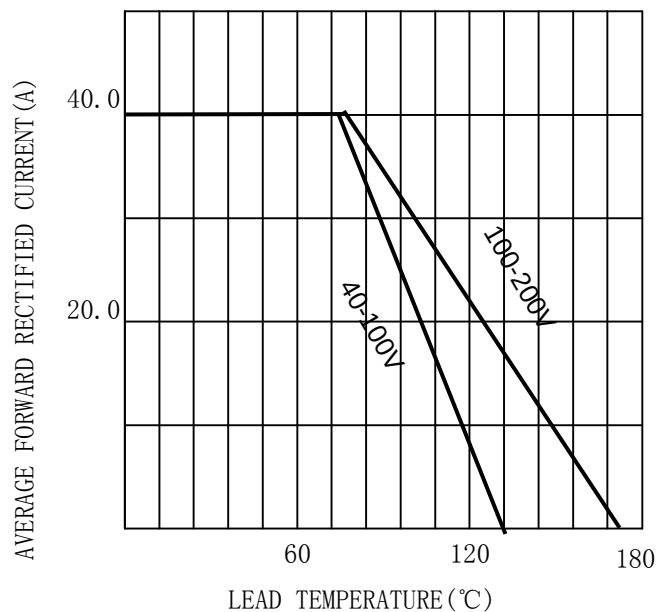


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

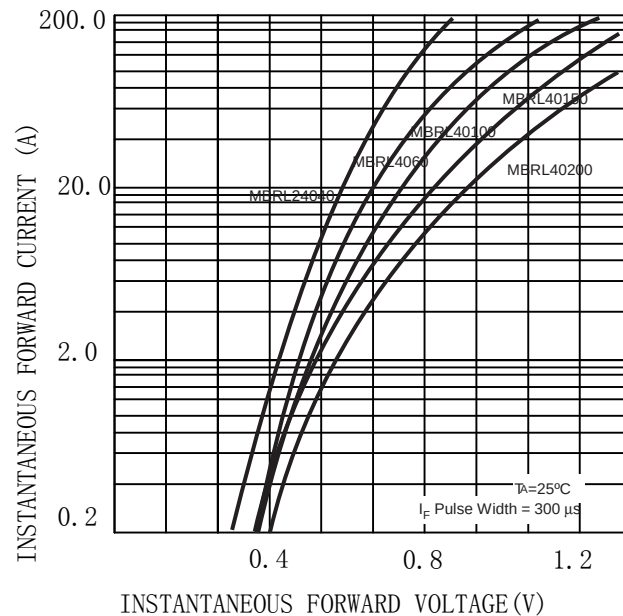


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

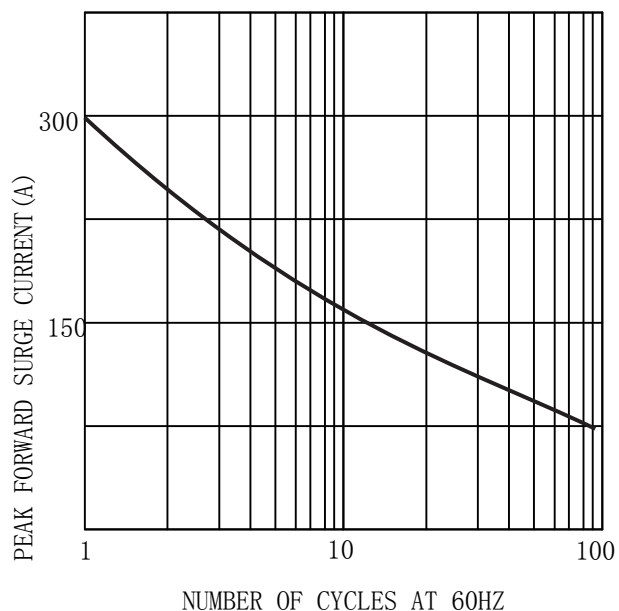
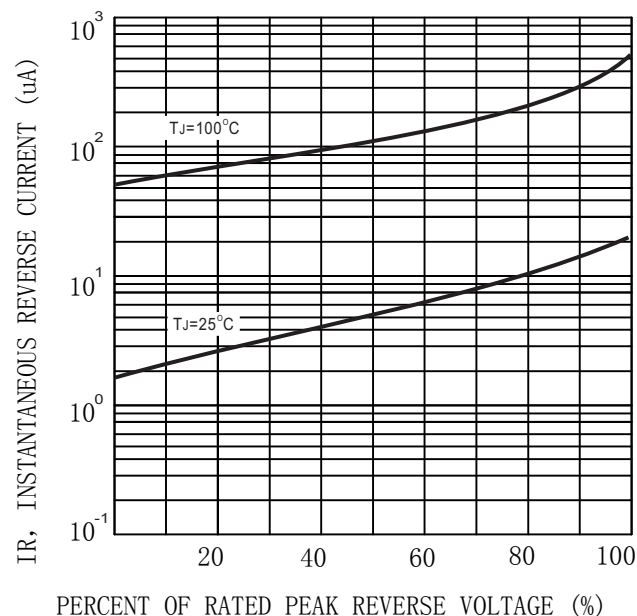


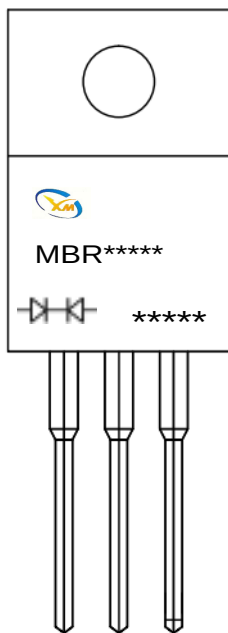
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION

TO-220AB/CT



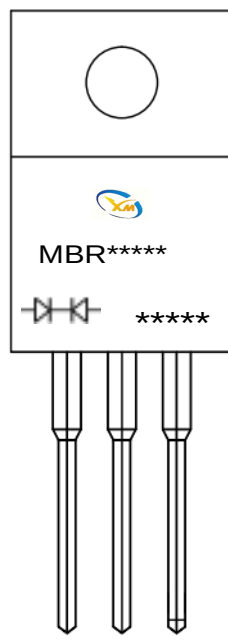
 = Polar line

 = Logo

***** = Date Code Marking

MBR***** = Marking Code

TO-220F/FCT



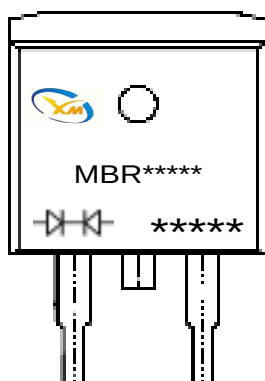
 = Polar line

 = Logo

***** = Date Code Marking

MBR***** = Marking Code

TO-263/CS



 = Polar line

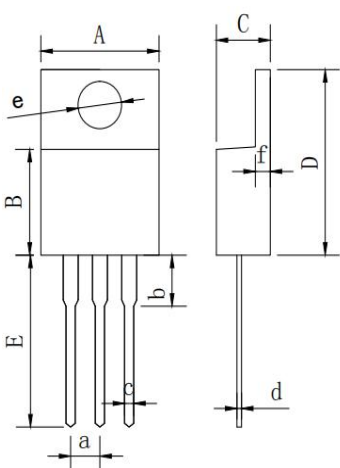
 = Logo

***** = Date Code Marking

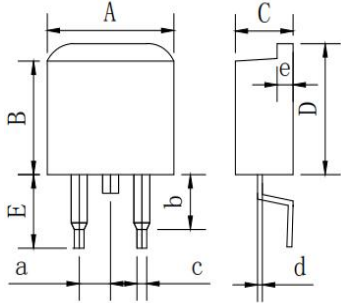
MBR***** = Marking Code



Package Outline Dimensions millimeters

T0-220AB/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	Ø
	f	0.05	0.06	1.20	1.40	

T0-220F/FCT						
The technical drawing shows two views of a component. The top view is a rectangle with width A and height B. It features a central circular feature with a diameter dimensioned as 'e'. Below the rectangle, three vertical pins are shown, with the distance between the centers of the outer two pins dimensioned as 'a'. The height of these pins from the base of the rectangle is dimensioned as 'E'. The width of one pin is dimensioned as 'b'. The side view shows the component's profile with a total height D and a base width C. The pins are shown in profile with a height dimensioned as 'f' and a base width dimensioned as 'd'. The distance from the top of the component to the top of the pins is dimensioned as 'E'.	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	

T0-263/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.