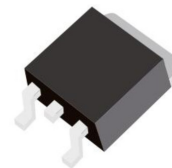




**Schottky Diodes**  
**Reverse Voltage- 60V**  
**Forward current-20A**

**Features**

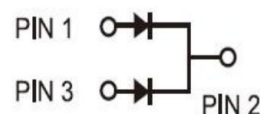
Schottky chip  
Ideal for surface mounted applications  
Low forward voltage drop, Low power loss, high efficiency  
Plastic Case Material has UL Flammability



TO-263

**Mechanical Data**

Package: 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



**Maximum Ratings (Ta=25℃ Unless otherwise)**

Type Number	SYMBOL	MBR2060CS	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	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 @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode	$I^2t$	70.13	$\text{A}^2\text{S}$
Maximum Forward Voltage at 10.0A DC $T_A = 25^\circ\text{C}$	$V_{FM}$	0.75	V
Maximum Reverse Current $T_A = 25^\circ\text{C}$	IR	0.1	mA
at Rated DC Blocking Voltage $T_A = 110^\circ\text{C}$		20	mA
Typical Thermal Resistance Between junction to board	$R_{QJB}$	50.0	$^\circ\text{C/W}$
	$R_{QJC}$	2.0	
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

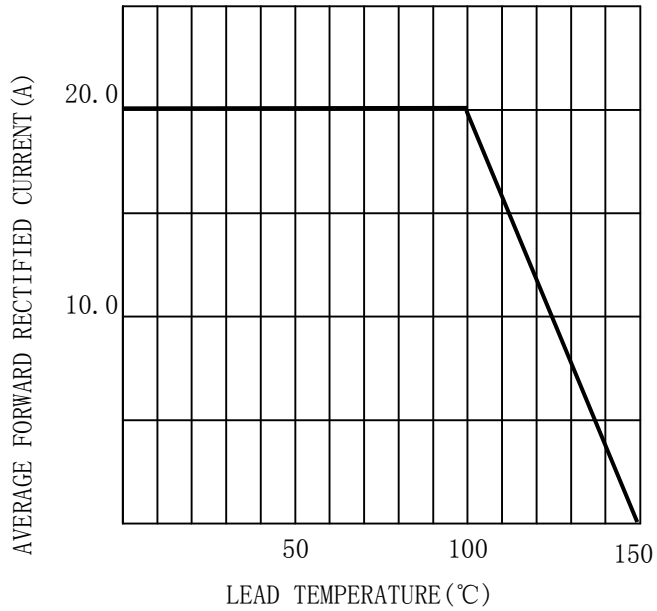


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

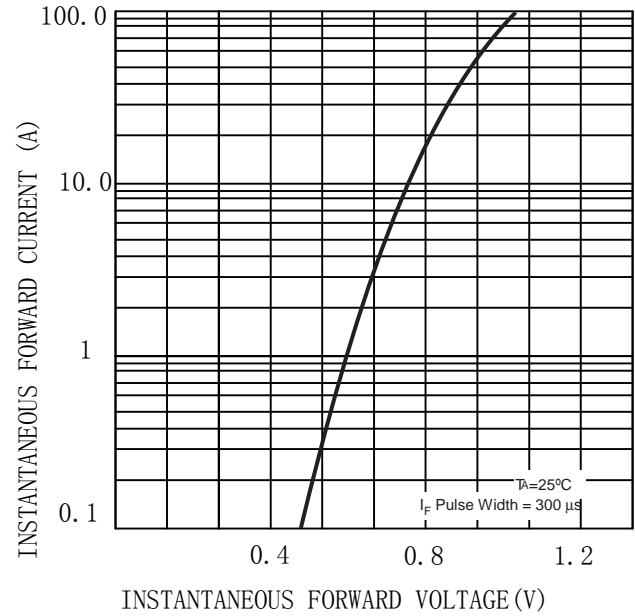


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

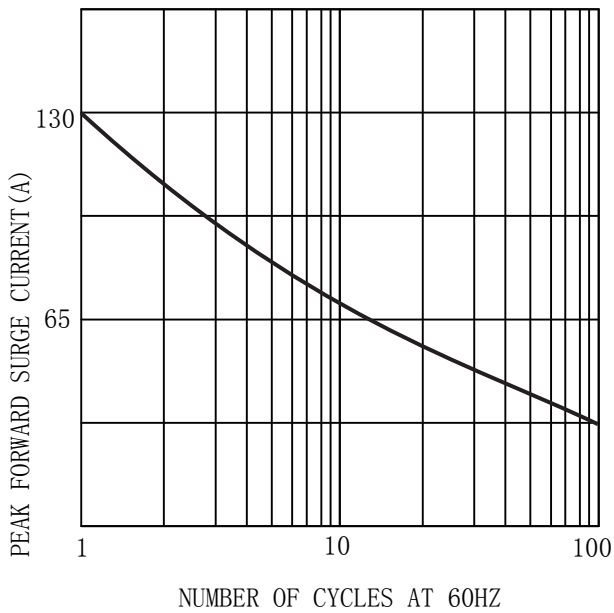
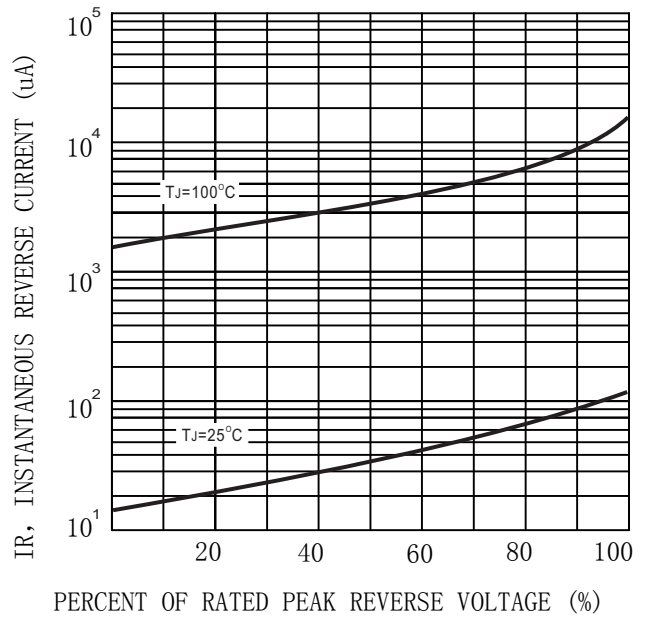


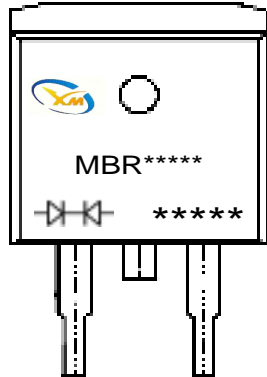
FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION

TO-263/CS



⏏ = Polar line

XM = Logo

\*\*\*\*\* = Date Code Marking

MBR\*\*\*\*\* = Marking Code

## Package Outline Dimensions millimeters

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	



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