

# **Schottky Diodes**

#### **Features**

- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

#### **Typical Applications**

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

#### **Mechanical Data**

• Package: TO-252

Molding compound meets UL 94 V-0 flammability

rating, RoHS-compliant

• Terminals: Tin plated leads, solderable per J-STD-

002 and JESD22-B102

• Polarity: As marked

#### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBR20100CD	MBR20150CD	MBR20200CD
Device marking code			MBR20100CD	MBR20150CD	MBR20200CD
Repetitive Peak Reverse Voltage	VRRM	V	100	150	200
Average Rectified Output Current @60Hz sine wave, R-load, Ta=25℃	lo	А	20		
Surge(Non-repetitive)Forward Current @ $60H_Z$ half sine-wave, 1 cycle, $T_a$ =25 $^{\circ}$ C	IFSM	А	130		
Current Squared Time @1ms≤t<8.3ms Tj=25°C,	l <sup>2</sup> t	A <sup>2</sup> s	70		
Storage Temperature	T <sub>stg</sub>	$^{\circ}$	-55 ~ +175		
Junction Temperature	Tj	$^{\circ}$	-55 ~ +175		

#### **■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBR20100CD	MBR20150CD	MBR20200CD
Maximum instantaneous forward voltage drop per diode	VFM	٧	IFM=10.0A	0.83	0.87	0.9
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1		VRM=VRRM T <sub>a</sub> =25°C	0.1		
	IRRM2	mA	VRM=VRRM T <sub>a</sub> =125°C	20		

#### **■Thermal Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

PARA	METER	SYMBOL	UNIT	MBR20100CD	MBR20150CD	MBR20200CD
Thermal Resistance	Between junction and case	R <sub>θJ-C</sub>	°CMV		5.0	

**■Ordering Information** (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR20100CD THRU MBR20200CD	Approximate 0.32	2500	2500	25000	Reel

#### **■Characteristics** (Typical)

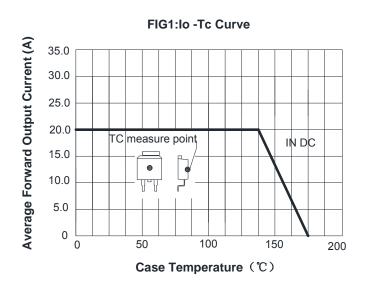
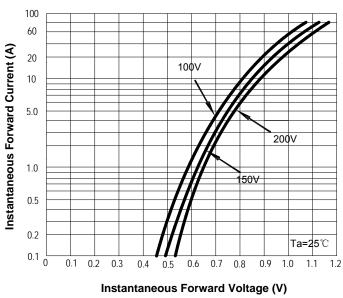
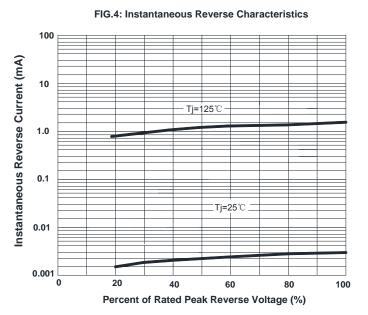


FIG2:Surge Forward Current Capability 140 Peak Forward Surge Current (A) 120 100 8.3ms Single Half Sine-Wave 80 JEDEC Method 60 40 20 10 50 100 **Number of Cycles** 

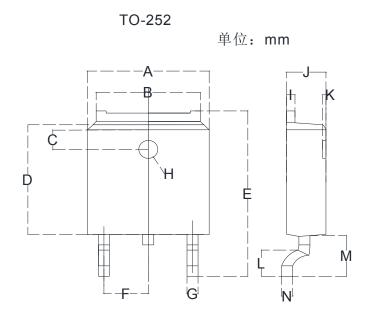
FIG3: Forward Voltage







#### **■**Outline Dimensions



TO-252					
Dim	Min	Max			
Α	6.500	6.700			
В	5.100	5.460			
С	1.400	1.800			
D	6.000	6.200			
Е	10.000	10.400			
F	2.166	2.366			
G	0.660	0.860			
Н	Ф1.050	Ф1.350			
I	0.460	0.580			
J	2.200	2.400			
K	0	0.300			
L	0.890	2.290			
М	2.730	3.080			
N	0.430	0.580			



#### **Disclaimer**

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// <a href="http://www.21yangjie.com">www.21yangjie.com</a>, or consult your nearest Yangjie's sales office for further assistance.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers category:

Click to view products by Yangjie manufacturer:

Other Similar products are found below:

CUS06(TE85L,Q,M) MA4E2039 D1FH3-5063 MBR0530L-TP MBR10100CT-BP MBR30H100MFST1G MMBD301M3T5G PMAD1103-LF PMAD1108-LF RB160M-50TR RB520S-30 RB551V-30 DD350N18K DZ435N40K DZ600N16K BAS16E6433HTMA1 BAS 3010S-02LRH E6327 BAT 54-02LRH E6327 IDL02G65C5XUMA1 NSR05F40QNXT5G NSVR05F40NXT5G JANS1N6640 SB07-03C-TB-H SB1003M3-TL-W SBAT54CWT1G SBM30-03-TR-E SBS818-TL-E SK32A-LTP SK33A-TP SK34A-TP SK34B-TP SMD1200PL-TP ACDBN160-HF SS3003CH-TL-E STPS30S45CW PDS3100Q-7 GA01SHT18 CRS10I30A(TE85L,QM MBR1240MFST1G MBRB30H30CT-1G BAS28E6433HTMA1 BAS 70-02L E6327 HSB123JTR-E JANTX1N5712-1 VS-STPS40L45CW-N3 DD350N12K SB007-03C-TB-E SB10015M-TL-E SB1003M3-TL-E SK110-LTP