

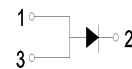
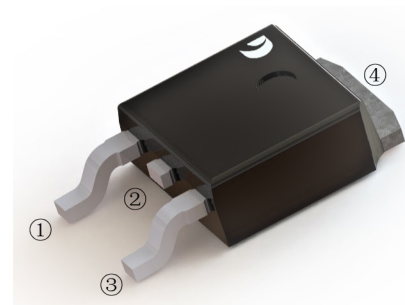
## LOW VF SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **100** Volts  
 FORWARD CURRENT - **20.0** Amperes

### FEATURES

- Low power loss, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

### TO-252(D-PAK)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

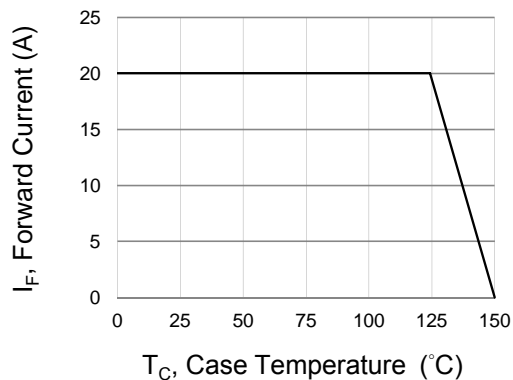
Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER   | SYMBOL          | VALUE        | UNIT |
|---|-----------------|--------------|------|
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 100          | V    |
| Maximum rms voltage   | $V_{RMS}$       | 70           | V    |
| Maximum average forward rectified current   | $I_{F(AV)}$     | 20           | A    |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$       | 180          | A    |
| Typical junction capacitance ( $V_R=4V$ , $f=1MHz$ )                              | $C_J$           | 620          | pF   |
| Typical thermal resistance per diode (Note 1)                                     | $R_{\theta JC}$ | 45           | °C/W |
| Operating junction temperature range  | $T_J$           | -55 to + 125 | °C   |
| Storage temperature range   | $T_{STG}$       | -55 to + 150 | °C   |

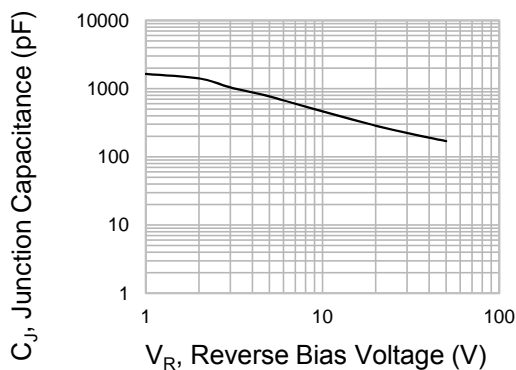
Note : 1. Mounted on infinite heatsink.

### ELECTRICAL CHARACTERISTICS( $T_A=25^\circ C$ unless otherwise noted)

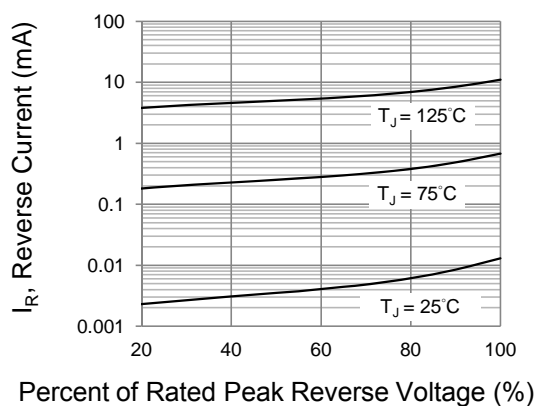
| PARAMETER                     | SYMBOL   | TEST CONDITIONS   | MIN. | TYP. | MAX. | UNIT    |
|-------------------------------|----------|-------------------|------|------|------|---------|
| Breakdown voltage             | $V_{BR}$ | $I_R=0.5mA$       | 100  | -    | -    | V       |
| Instantaneous forward voltage | $V_F$    | $I_F=2A$          | -    | 0.42 | -    | V       |
|                               |          | $I_F=5A$          | -    | 0.47 | -    |         |
|                               |          | $I_F=10A$         | -    | 0.55 | -    |         |
|                               |          | $I_F=20A$         | -    | 0.65 | 0.70 |         |
| Instantaneous forward voltage | $V_F$    | $I_F=2A$          | -    | 0.36 | -    | V       |
|                               |          | $I_F=5A$          | -    | 0.42 | -    |         |
|                               |          | $I_F=10A$         | -    | 0.47 | -    |         |
|                               |          | $I_F=20A$         | -    | 0.60 | -    |         |
| Reverse current per diode     | $I_R$    | $V_R=70V$         | -    | 5    | -    | $\mu A$ |
|                               |          | $V_R=100V$        | -    | -    | 100  | $\mu A$ |
|                               |          | $T_J=25^\circ C$  | -    | -    | -    | $\mu A$ |
|                               |          | $T_J=125^\circ C$ | -    | 5.5  | -    | mA      |



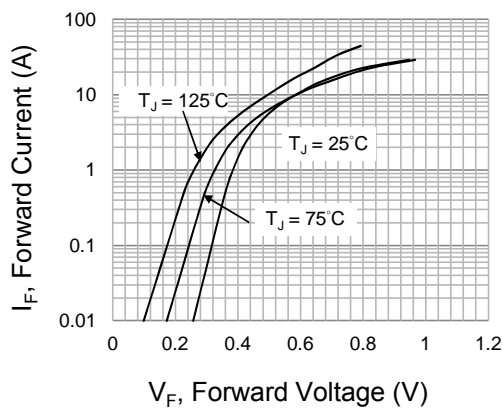
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**

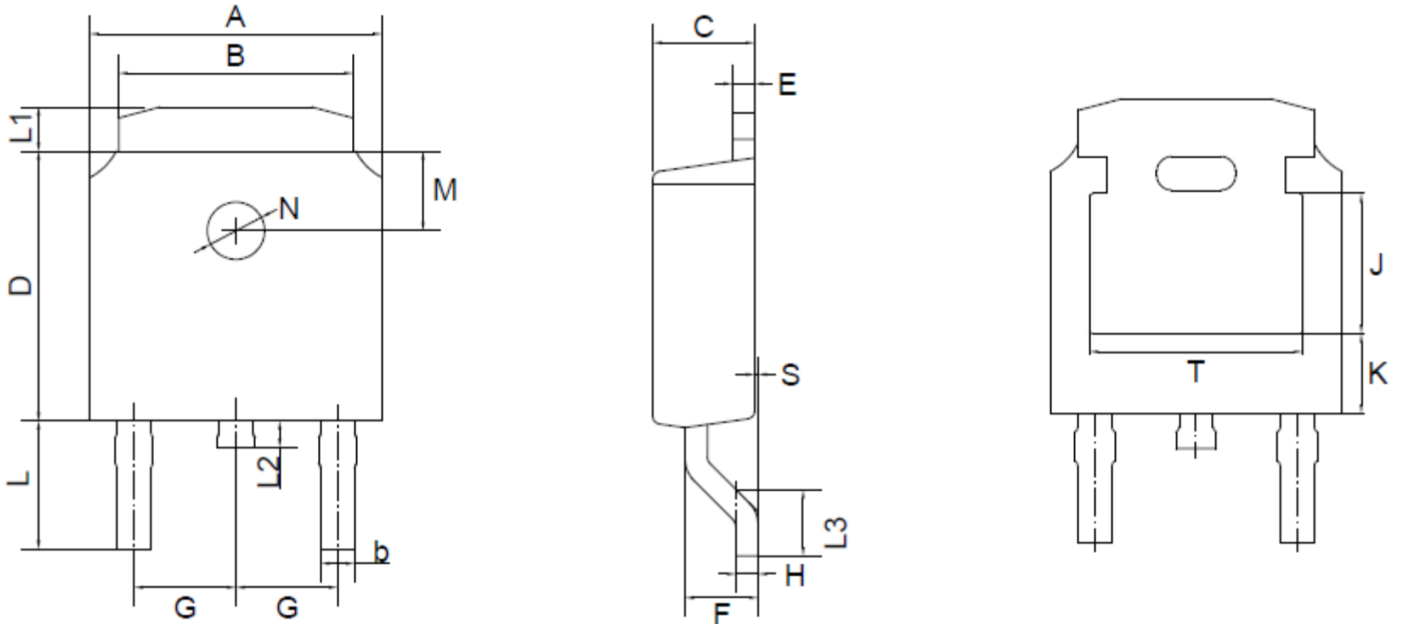


**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

TO-252(D-PAK) Package Outline Dimensions



TO-252(D-PAK) mechanical data

| UNIT |     | A   | B   | b   | C   | D   | E   | F   | G       | H    | L   | L1  | L2  | L3   | S   | M       | N       | J    | K    | T    |
|------|-----|-----|-----|-----|-----|-----|-----|-----|---------|------|-----|-----|-----|------|-----|---------|---------|------|------|------|
| mm   | max | 6.7 | 5.5 | 0.8 | 2.5 | 6.3 | 0.6 | 1.8 | 2.29    | 0.55 | 3.1 | 1.2 | 1.0 | 1.75 | 0.1 | 1.8     | 1.3     | 3.16 | 1.80 | 4.83 |
|      | min | 6.3 | 5.1 | 0.3 | 2.1 | 5.9 | 0.4 | 1.3 | TYPICAL | 0.45 | 2.7 | 0.8 | 0.6 | 1.40 | 0.0 | TYPICAL | TYPICAL | ref. | ref. | ref. |
| mil  | max | 264 | 217 | 31  | 98  | 248 | 24  | 71  | 90      | 22   | 122 | 47  | 39  | 69   | 4   | 71      | 51      | 124  | 71   | 190  |
|      | min | 248 | 201 | 12  | 83  | 232 | 16  | 51  | TYPICAL | 18   | 106 | 31  | 24  | 55   | 0   | TYPICAL | TYPICAL | ref. | ref. | ref. |

**Important Notice and Disclaimer**

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Jingdao Microelectronics assume any liability for application assistance or customer product design. Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.

## 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 [Jingdao](#) 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](#)