

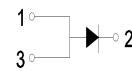
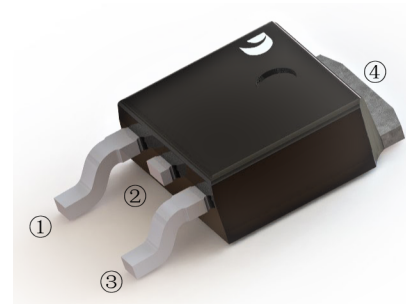
LOW VF SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **45** Volts
 FORWARD CURRENT - **15.0** 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}	45	V
Maximum rms voltage	V_{RMS}	31.5	V
Maximum average forward rectified current	$I_{F(AV)}$	15	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 (Note 1)	$R_{\theta JC}$	45	°C/W
Operating junction temperature range	T_J	-55 to + 150	°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}	$I_R=0.5mA$	45	-	-	V
Instantaneous forward voltage	V_F	$I_F=1A$ $T_J=25^\circ C$	-	0.30	-	V
		$I_F=5A$ $T_J=25^\circ C$	-	0.38	-	V
		$I_F=15A$ $T_J=25^\circ C$	-	0.50	0.55	V
Reverse current	I_R	$V_R=36V$ $T_J=25^\circ C$	-	5	-	μA
		$V_R=45V$ $T_J=25^\circ C$	-	-	50	μA
		$V_R=45V$ $T_J=125^\circ C$	-	8.5	-	mA

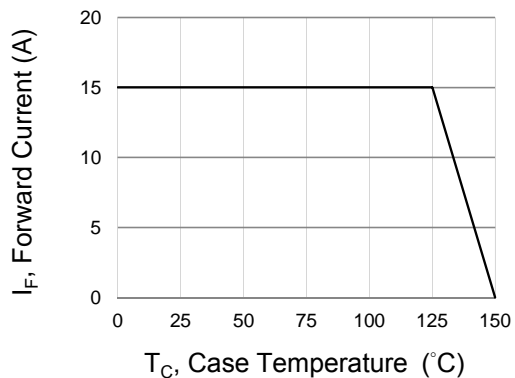


Fig.1 Forward Current Derating Curve

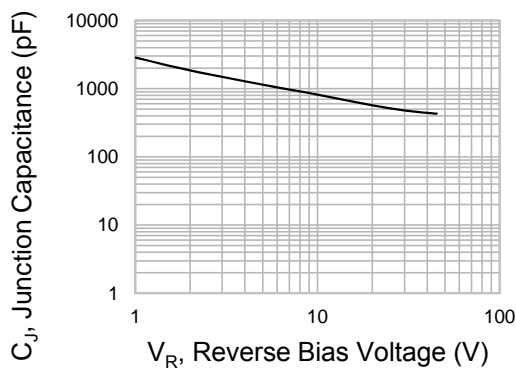


Fig.2 Typical Junction Capacitance

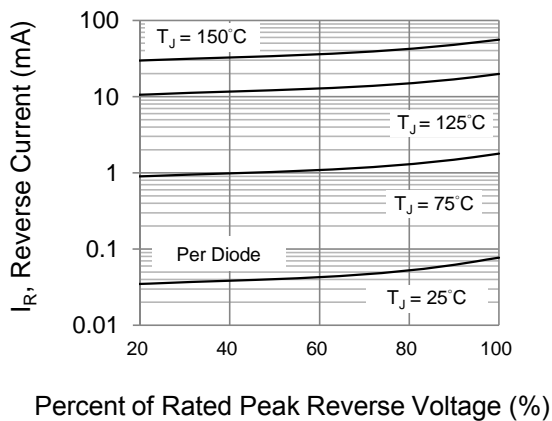


Fig.3 Typical Reverse Characteristics

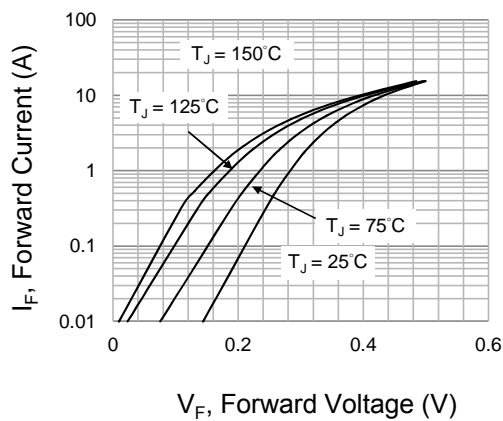
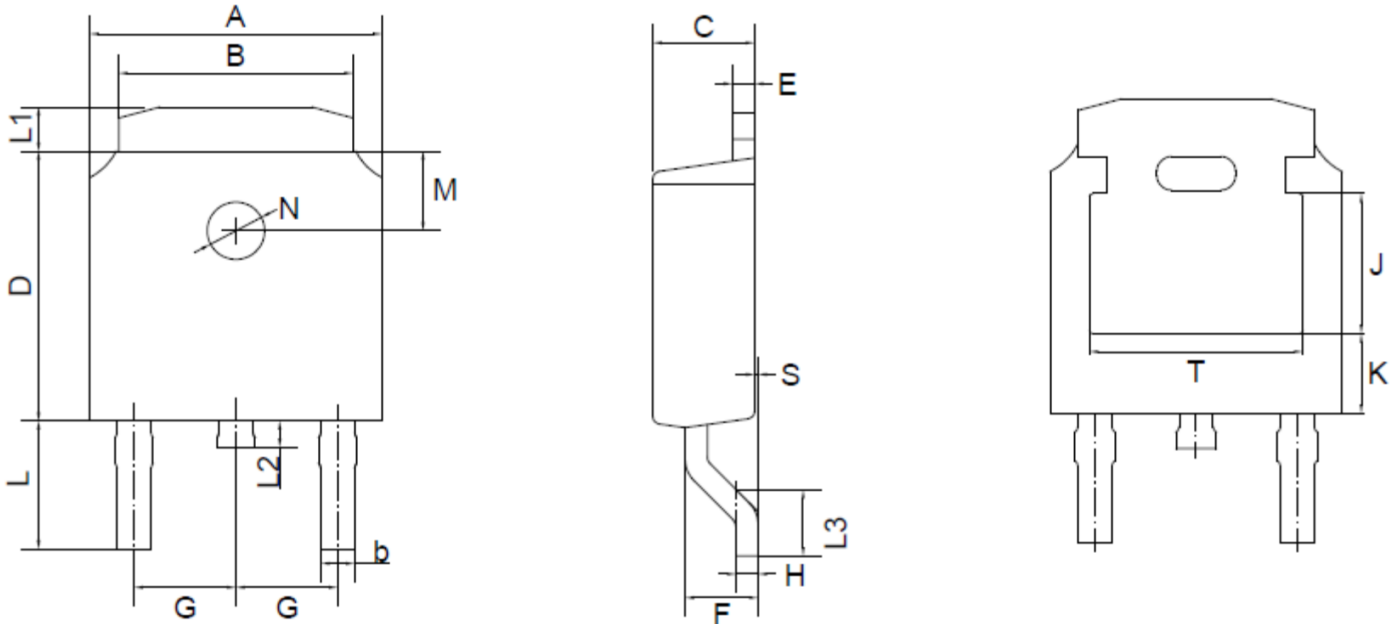


Fig.4 Typical Forward Characteristics

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.