



Schottky Barrier Rectifiers

Reverse Voltage - 200 V

Forward Current - 10 A

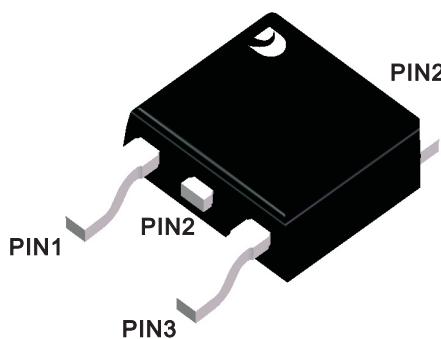
Features

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

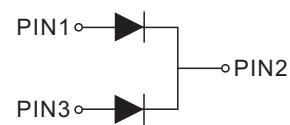
Mechanical data

- Case: TO-252W
- Approx. Weight: 0.33g (0.012oz)
- RoHS compliant
- Case Material: "Green" molding compound, UL flammability classification 94V-0, "Halogen-free".

TO-252W



ROHS
COMPLIANT



Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Characteristics	Symbols	MBR10200DT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current Per leg Per device	$I_{F(AV)}$	5 10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg)	I_{FSM}	110	A
Max Instantaneous Forward Voltage at 5 A DC per leg	V_F	0.90	V
Maximum DC Reverse Current $T_J = 25^\circ C$ at Rated DC Reverse Voltage $T_J = 100^\circ C$	I_R	10 500	uA
Typical Junction Capacitance ⁽¹⁾	C_j	110	pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta,JC}$ $R_{\theta,JA}$	5 50	°C/W
Operating Junction Temperature Range	T_j	-55 ~ +175	°C
Storage Temperature Range	T_{stg}	-55 ~ +175	°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.

(2) P.C.B. mounted with 10cmX10cmX1mm copper pad areas.



Fig.1 Typical Forward Current Derating Curve

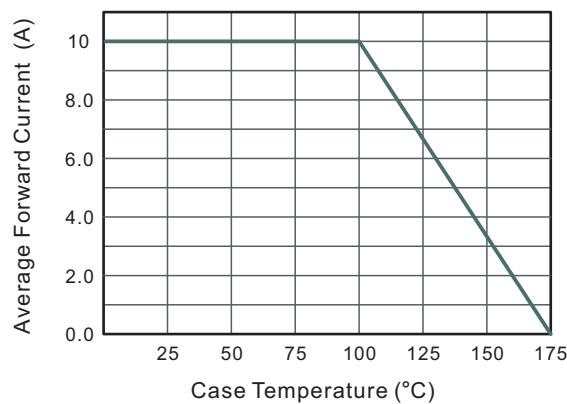


Fig.2 Typical Reverse Characteristics

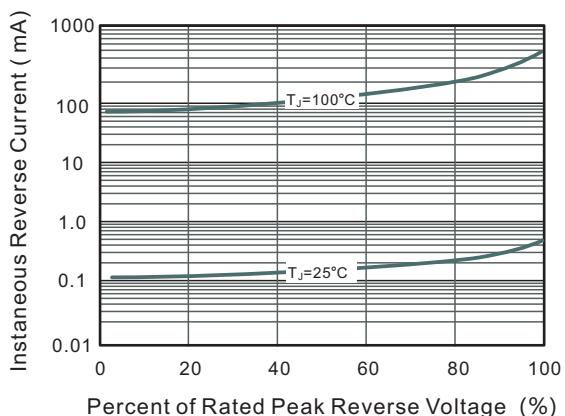


Fig.3 Typical Forward Characteristics

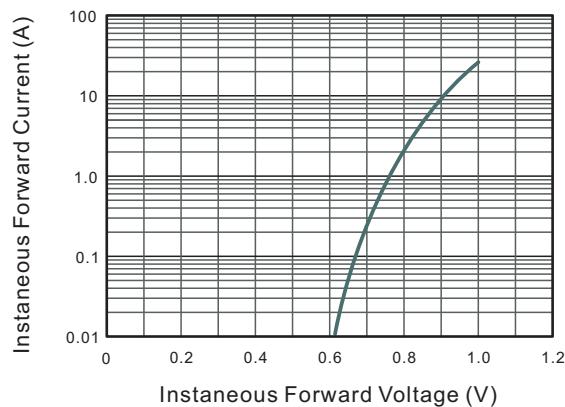


Fig.4 Typical Junction Capacitance

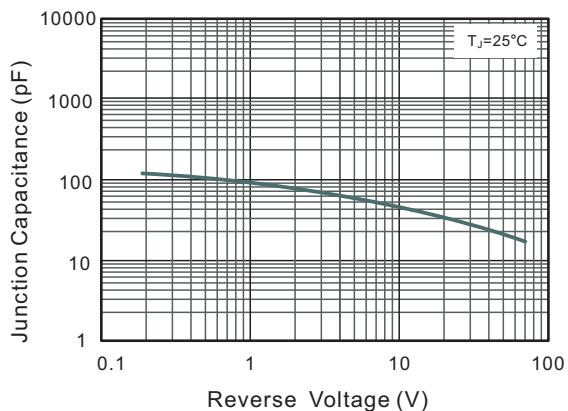


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

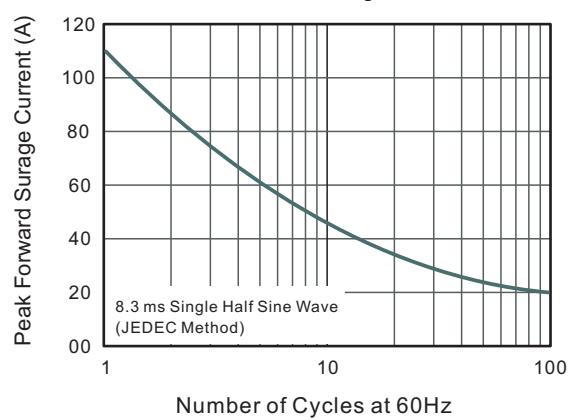
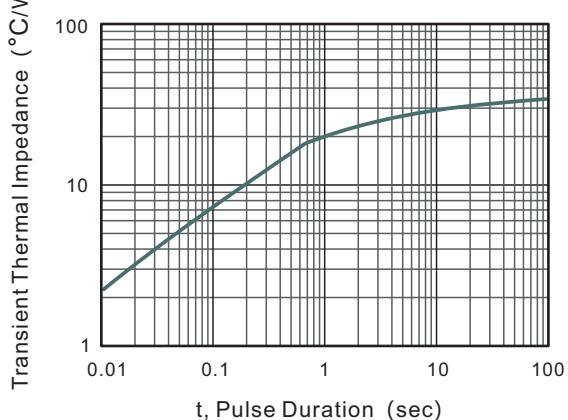
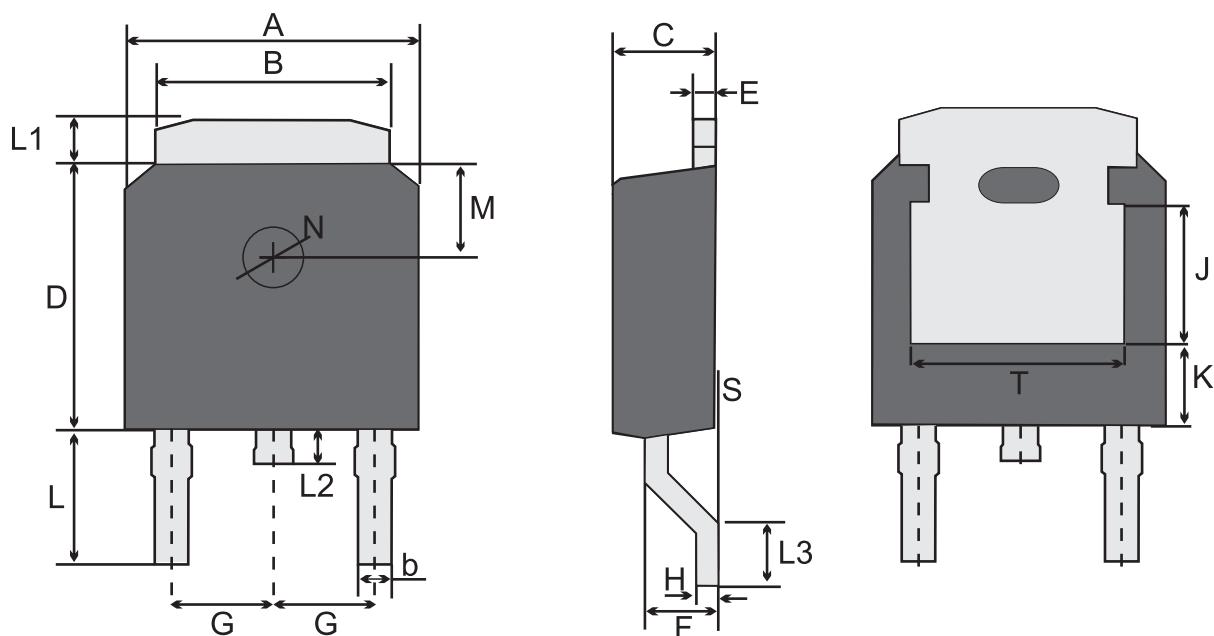


Fig.6- Typical Transient Thermal Impedance





TO-252W(D-PAK) Package Outline Dimensions



TO-252W(D-PAK)Mechanical data

UNIT		A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N	J	T	K
mm	max	6.7	5.53	0.86	2.5	6.3	0.61	1.87	2.3 typ.	0.55	3.1	1.2	1.0	1.75	0.1	1.8 typ.	1.3 typ.	3.2 ref.	4.83 ref.	1.8 ref.
	typ	6.6	5.33	0.76	2.3	6.1	0.51	1.57		0.50	2.95	1.0	0.8	1.30	0.05					
	min	6.3	5.13	0.66	2.1	5.9	0.41	1.27		0.45	2.7	0.8	0.6	1.0	/					
mil	max	264	218	34	98	248	24	74	91 typ.	22	121	47	39	69	3.9	71 typ.	51 typ.	126 ref.	190 ref.	71 ref.
	typ	260	210	30	91	240	20	62		20	116	39	31	51	2					
	min	248	202	26	83	232	16	50		18	106	31	24	39	/					

Marking

Type number	Marking code
MBR10200DT	MBR10200DT



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