

MBRB10100CT

Rev.F May.-2016

/ Descriptions

Schottky Diode in a TO-263 Plastic Package.

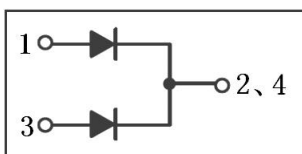
/ Features

Low power loss, high efficiency.

/ Applications

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

/ Equivalent Circuit



/ Pinning



PIN1 Anode

PIN 2 4 Cathode

PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_{RM}	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average forward rectified Current	I_F	2X5	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Thermal Resistance Junction to Case	R_{Jc}	2.5	°C/W
Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

/ Electrical Characteristics(Ta=25)

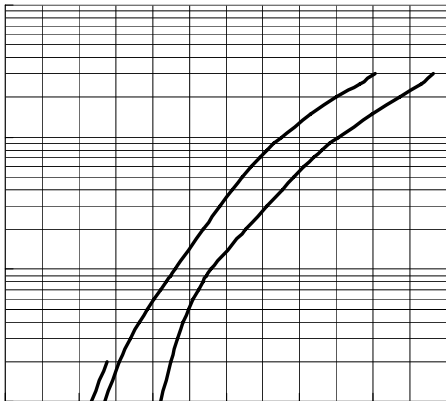
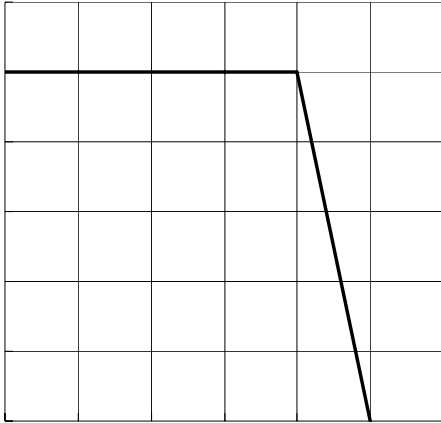
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=0.3mA$	100			V
Forward Voltage	V_{FM}	$I_F=5.0A$ $T_j=25^\circ C$			0.85	V
		$I_F=5.0A$ $T_j=125^\circ C$			0.75	V
		$I_F=10A$ $T_j=25^\circ C$			0.95	V
		$I_F=10A$ $T_j=125^\circ C$			0.85	V
Instantaneous Reverse Current	I_R Note 1	$V_R=100V$ $T_j=25^\circ C$			10	uA
		$V_R=70V$ $T_j=125^\circ C$			1	mA
		$V_R=100V$ $T_j=125^\circ C$			5	mA

/Notes

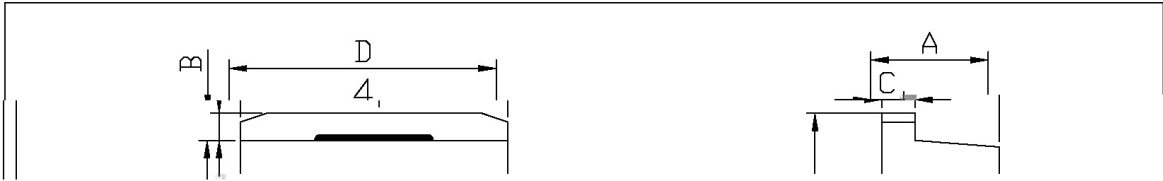
/Short duration pulse test used to minimize self-heating effect.

/ Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve



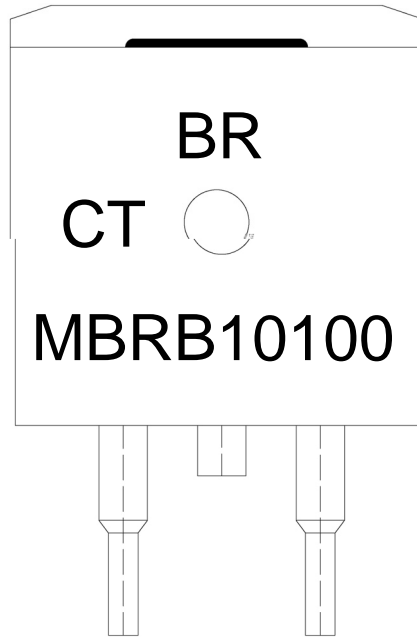
/ Package Dimensions



Symbol	Min	Max	Symbol	Min	Max
	A	4.30		4.70	E
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	e2	4.88	5.28
b1	1.15	1.35	L1	15.00	16.00
b2	0.40	0.60	L2	2.24	2.64
C	1.20	1.40	L3	1.20	1.60
D	9.80	10.20			

T0-263

/ Marking Instructions



Note:

BR:	Company Code
MBRB10100	Product Type.
CT:	Internal Structure
****:	Lot No. Code, code change with Lot No.

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