

Descriptions

This is Schottky Diode in a TO-252 Plastic Package.

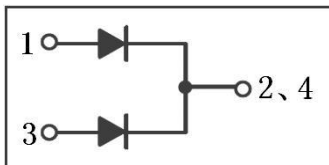
Features

- Low power loss
- High efficiency.
- HF Product

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

hFE Classifications & Marking

See Marking Instructions

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average Rectified Forward Current	$I_{F(AV)}$	2×5	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Thermal resistance, junction to case	$R_{\theta Jc}$	6.5	°C/W
Junction Temperature Range	T_{JMAX}	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

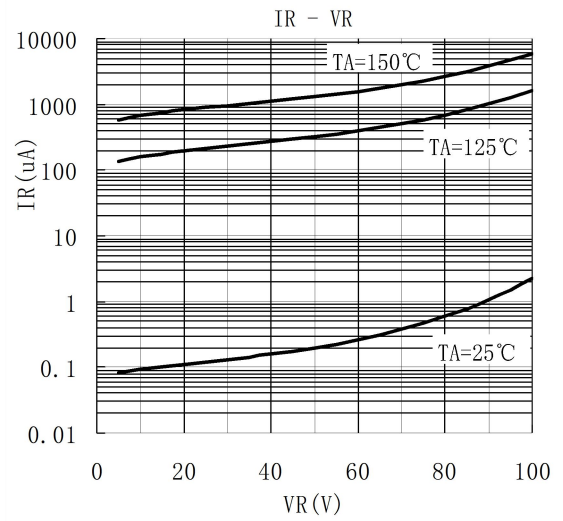
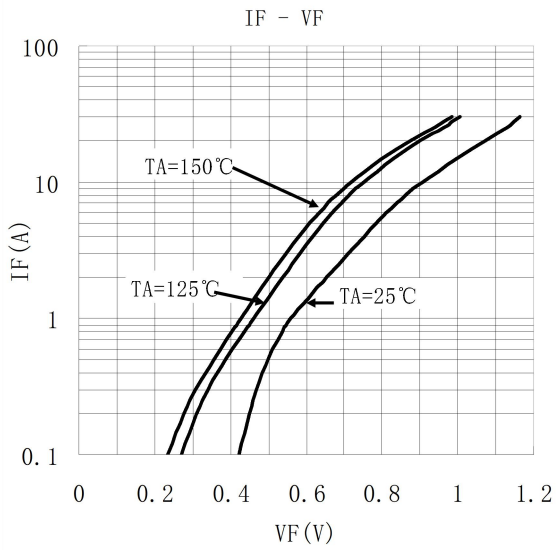
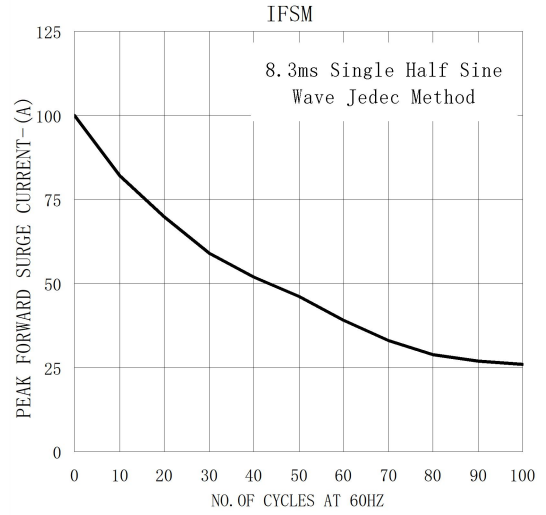
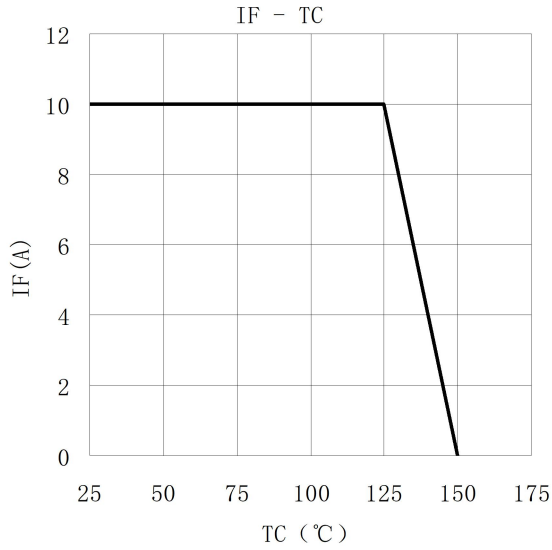
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	$I_R=0.3mA$	100			V
Forward Voltage	V_F	$I_F=5A$ $T_J=25^\circ C$			0.85	V
		$I_F=5A$ $T_J=125^\circ C$			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
		$V_R=70V$ $T_J=125^\circ C$			1.0	mA
		$V_R=100V$ $T_J=125^\circ C$			5.0	mA

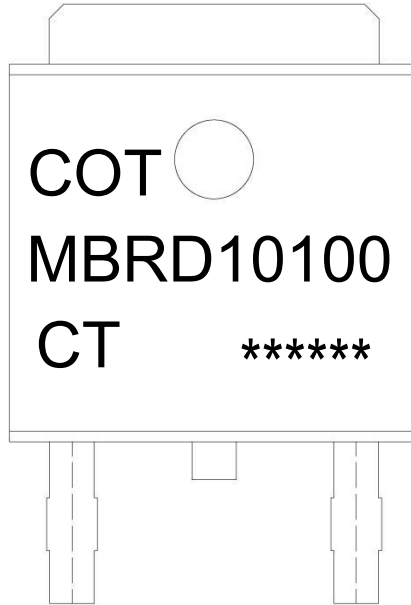
Notes:

1. Short duration pulse test used to minimize self-heating effect.
2. Unless otherwise noted, values for the parameters of a single chip

Electrical Characteristic Curve



Marking Instructions



Note:

- COT: Company Code
- MBRD10100: Product Type.
- CT: Internal Structure
- *****: *: Inner Code * : Year Code **: Week Code *: Lot Code

Packaging SPEC

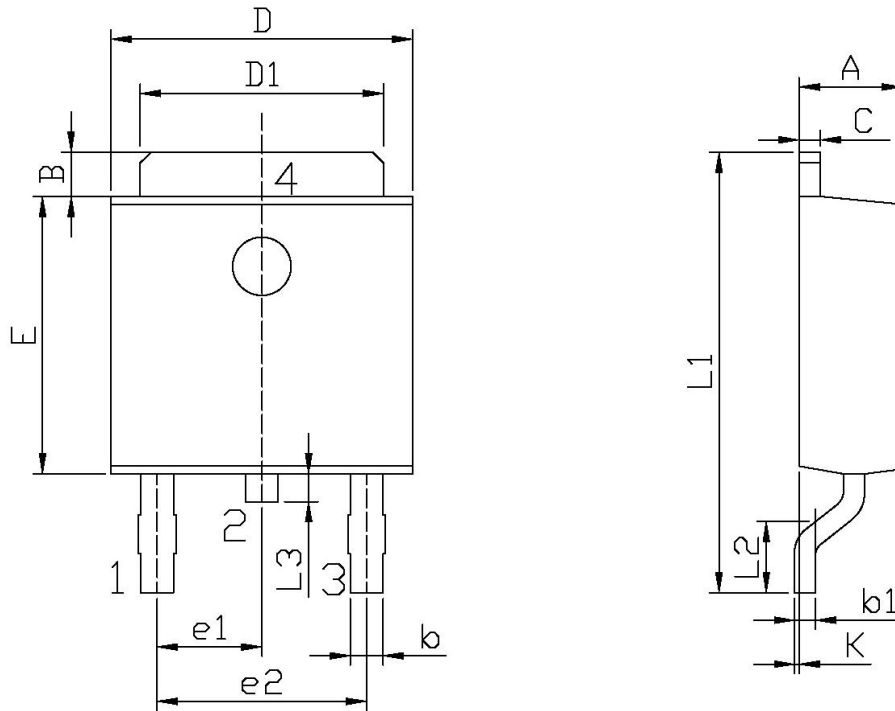
REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-252	2,500	2	5,000	5	25,000	13" ×16	360×360×50	385×257×392

TUBE

Package Type	Units					Dimension (unit: mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

Package Dimensions



单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.50	0.90	e2	4.43	4.73
b1	0.45	0.55	L1	9.45	9.95
C	0.45	0.55	L2	1.25	1.75
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10

TO-252