

Description

The MBRD10200CT is schottky barrier diode, TO-252 plastic package.

Features

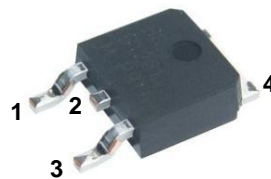
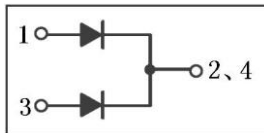
- Low power loss
- High efficiency
- Halogen-free product

Applications

- For use in low voltage
- High frequency inverters
- Free wheeling
- Polarity protection applications.

V_{RM}	$I_{F(AV)}$	I_{FSM}
200V	10A	80A

Equivalent Circuit & Pinning



PIN1: Anode

PIN 2,4: Cathode

PIN 3: Anode

Marking

See Marking Instructions.

Maximum Rating & Thermal Characteristics(Ta=25°C)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	200	V
Working Peak Reverse Voltage	$V_{R(RMS)}$	140	V
Average Rectified Forward Current	$I_{F(AV)}$	2X5	A
Non Repetitive Peak Surge Current	I_{FSM}	80	A
Junction Temperature Range	T_{jMAX}	150	°C
Storage Temperature Range	T_{stg}	-65~150	°C

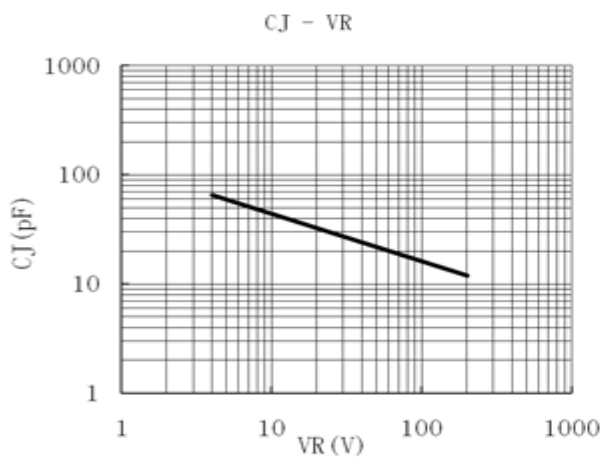
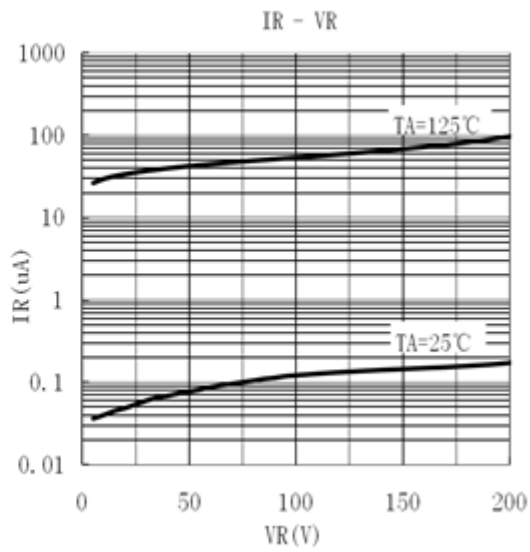
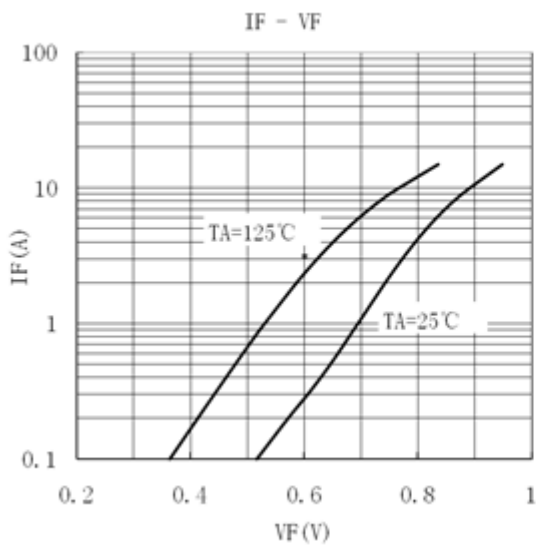
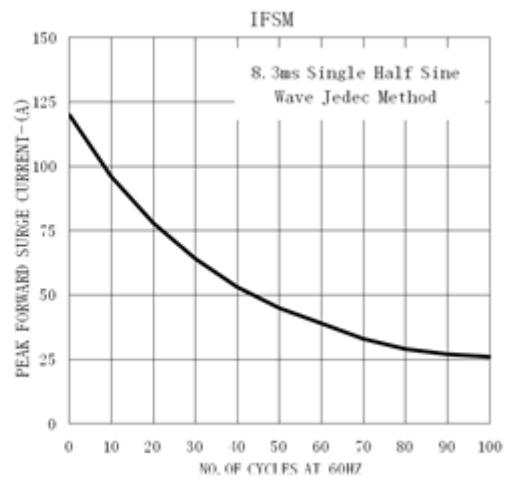
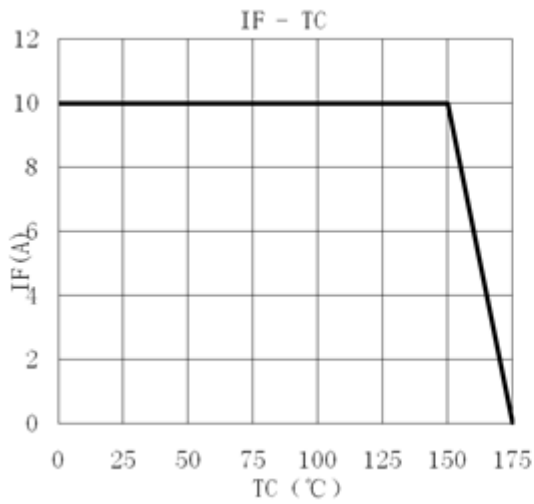
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	$I_R=100\mu A$	200			V
Forward Voltage	V_F	$I_F=5A$ $T_C=25^\circ C$		0.80	0.85	V
		$I_F=5A$ $T_C=125^\circ C$		0.68	0.75	V
		$I_F=10A$ $T_C=25^\circ C$		0.88	0.95	V
		$I_F=10A$ $T_C=125^\circ C$		0.77	0.85	V
Instantaneous Reverse Current	I_R (Note 1)	$V_R=200V$ $T_a=25^\circ C$			10	μA
		$V_R=150V$ $T_a=125^\circ C$			1	mA
		$V_R=200V$ $T_a=125^\circ C$			5	mA

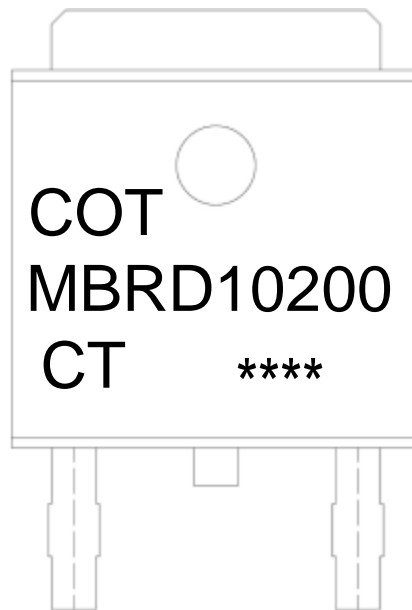
Notes:

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

Electrical Characteristic Curve



Marking instructions



Note:

COT:

MBRD10200:

CT:

****:

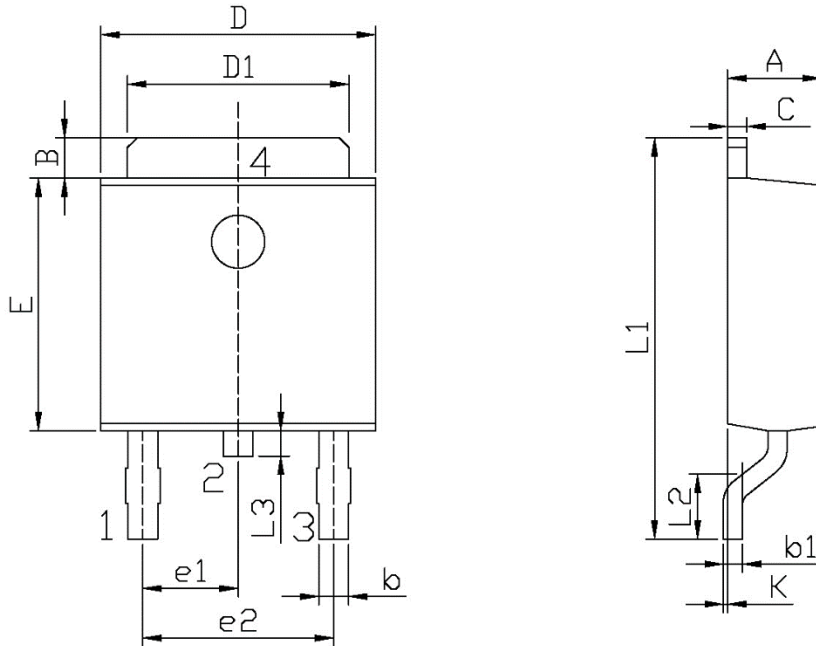
Company Code.

Product Type .

Internal Structure

Lot No. Code, code change with Lot No.

Package Outline 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