



MBR2045CT

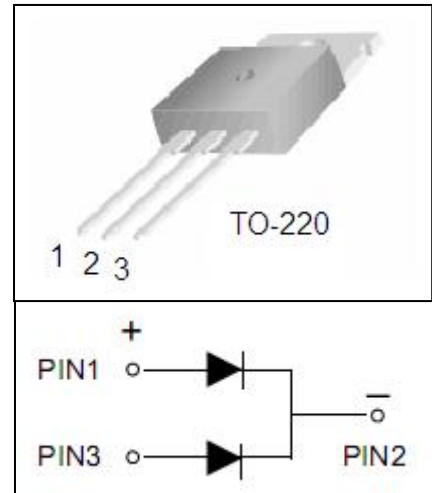
Dual High Voltage Schottky Rectifier

●Features:

- Common Cathode Structure
- Low Power Loss and High Efficiency
- Low Forward Voltage Drop
- High Surge Capability

●Application:

- High Frequency Switch
- Free Wheeling, and Polarity Protection Applications



Absolute Maximum Ratings (T_c=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Maximum Repetitive Reverse Voltage	45	V
V _R	Maximum DC Reverse Voltage	45	V
I _{F(AV)}	Average Rectified Forward Current, T _c =125°C	10(Per Leg) 20(Per Device)	A
I _{FSM}	Peak Forward Surge Current, 8.3ms Half Sine wave	150	A
T _j	Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55 to +150	°C

Thermal Characteristics (T_c=25°C unless otherwise noted)

Symbol	Parameter	Max	Unit
R _{θJC}	Thermal Resistance, Junction to Case Per Leg	2.2	°C /W
R _{θJA}	Thermal Resistance, Junction to Ambient Per Leg	92	°C /W

Electrical Characteristics (T_c=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Min	Max	Unit
V _{RRM}	Maximum Repetitive Reverse Voltage	I _R =100μA	45		V
I _R	Reverse Current	V _R =45V T _c =25°C V _R =45V T _c =125°C		0.1 50	mA
V _F	Forward Voltage	I _F =10A T _c =25°C I _F =10A T _c =125°C I _F =20A T _c =25°C I _F =20A T _c =125°C		0.55 0.50 0.60 0.55	V



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Typical Performance Characteristics

Figure 1. Forward Current Characteristics

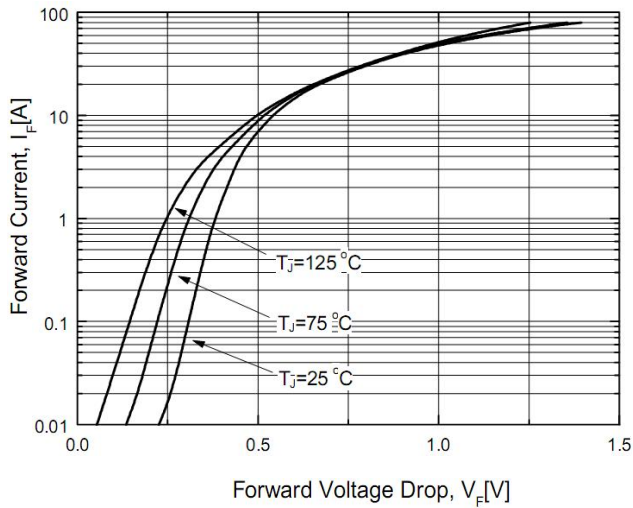


Figure 2. Reverse Leakage Current

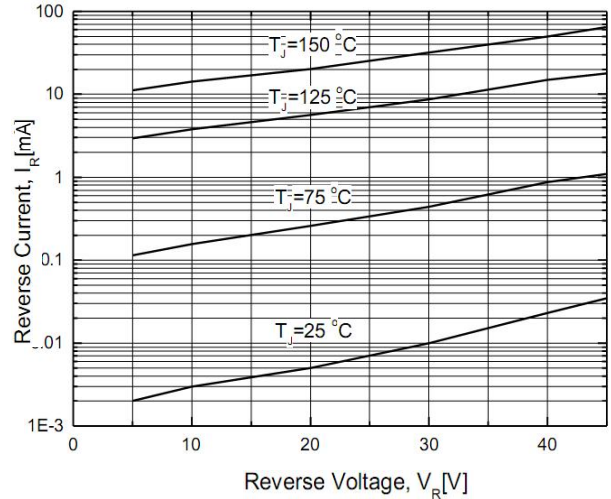


Figure 3. Junction Capacitance

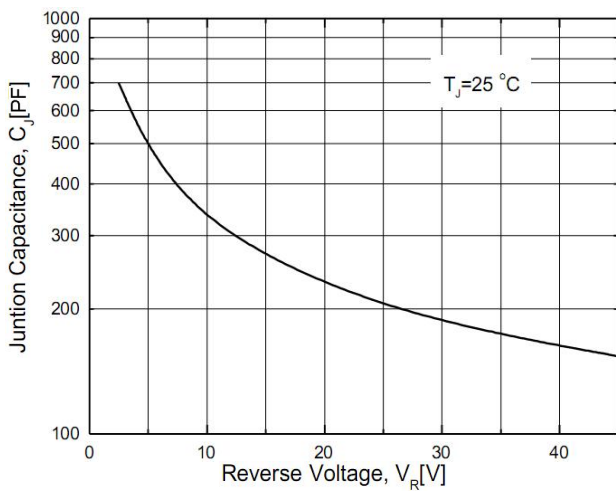
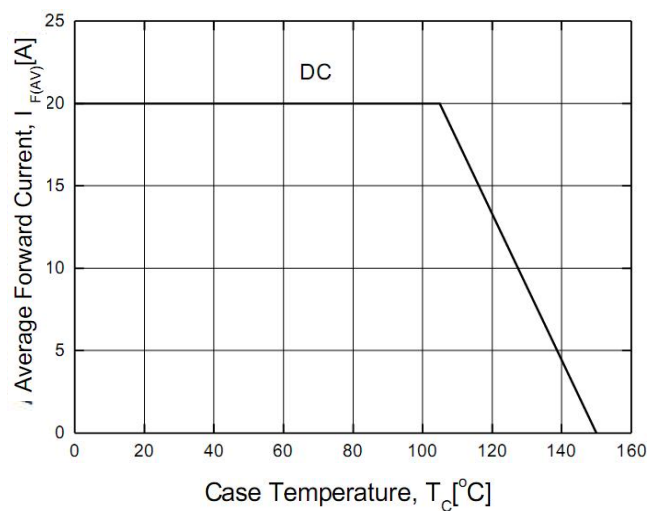


Figure 4. Power Derating





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UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	3.5		4.8	e		2.54	
B			2.4	F	1.1		1.4
B1			1.8	L	12.5		14.5
b	0.6			L1			3.5
$\phi b1$			1.2	L2			6.3
c	0.4			ϕP			
D			16.5	Q	2.5		3.1
D1	5.9		6.9	Q1	2.0		2.8
E			10.7	Z	3.0		

