



MBR20100DR

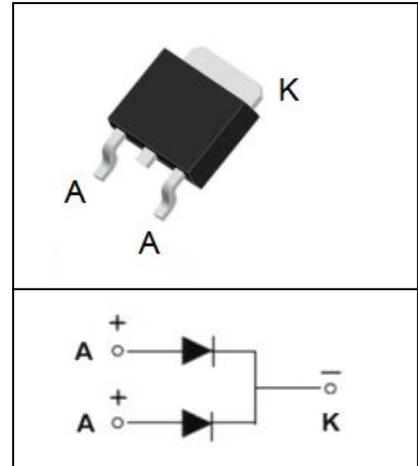
Dual High Voltage Schottky Rectifier

●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	100	V
V _R	Maximum DC Reverse Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current, T _c =120°C	10(Per Leg) 20(Per Device)	A
I _{FSM}	Peak Forward Surge Current, 8.3ms Half Sine wave	170	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	2.7	°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	100		V
I _R	Reverse Current	V _R = 100V T _c =25°C V _R = 100V T _c =125°C		0.1 5	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		0.91 0.81 1.01 0.91	V

V_F Typical Values: 0.81V@ I_F=10A, T_c=25°C

Typical Performance Characteristics

Figure 1. Forward Current Characteristics

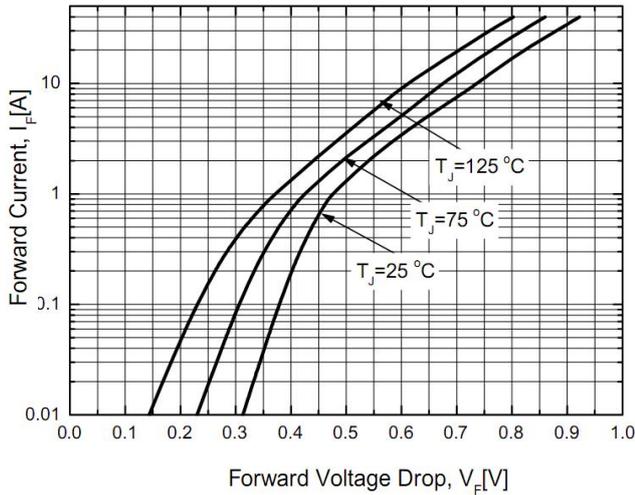


Figure 2. Reverse Leakage Current

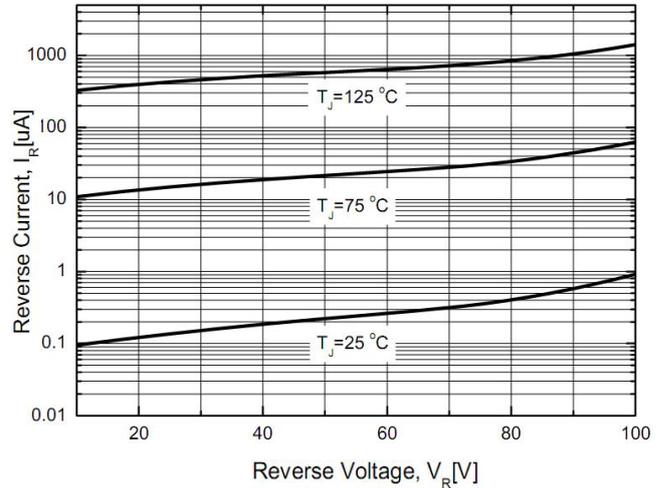


Figure 3. Junction Capacitance

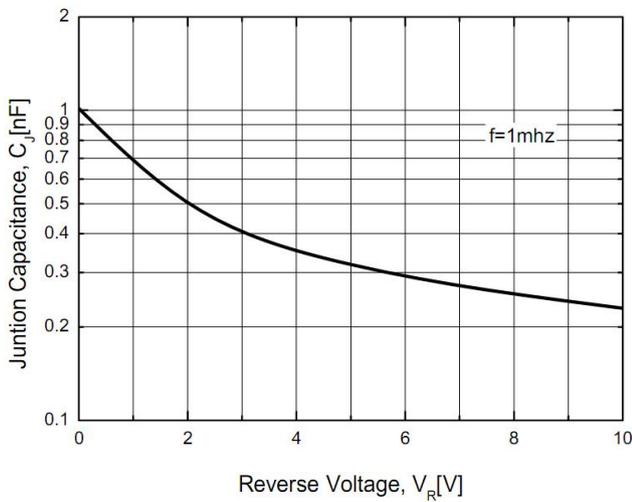
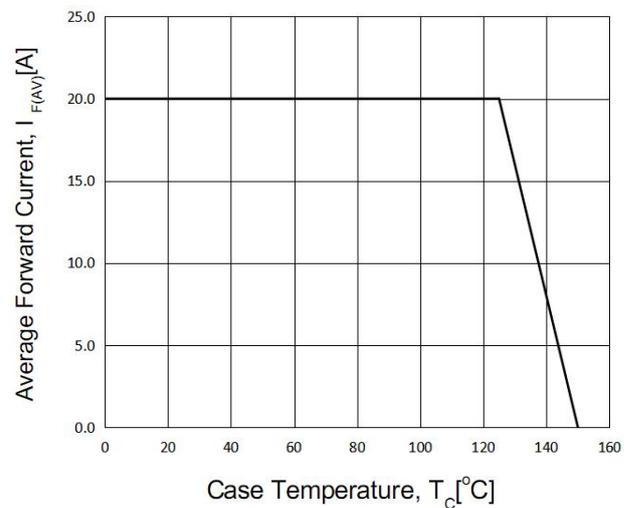


Figure 4. Power Derating





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TO-252 Package Dimensions

UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	6.40		6.60	D	2.90		3.10
A1	5.20		5.40	D1	0.45		0.55
A2	4.40		4.60	D2	0.45		0.55
A3	4.40		4.60	e		2.30	
A4	0		0.15	E	2.20		2.40
A5	4.65		4.95	F	0.45		0.55
B	5.90		6.20	G		1.70	
B1	1.57		1.77	L	1.40		1.60
C	0.90		0.96	θ (度)	0		10.00

