



MBR30100PT

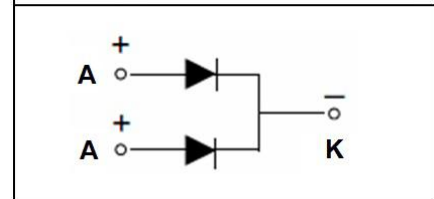
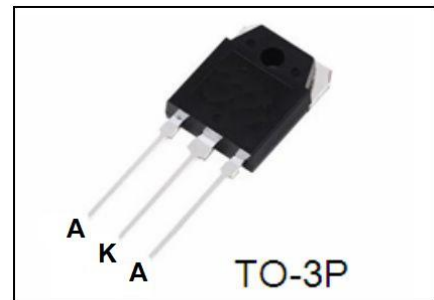
Dual High Voltage Schottky Rectifier

●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	15(Per Leg) 30(Per Device)	A
I _{FSM}	Peak Forward Surge Current, 8.3ms Half Sine wave	250	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	1.4	°C /W
R _{θJA}	Thermal Resistance, Junction to Ambient Per Leg	59	°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 =15A T _c =25°C I _F =15A T _c =125°C I _F =30A T _c =25°C I _F =30A T _c =125°C		0.88 0.78 1.05 0.95	V

Typical Performance Characteristics

Figure 1. Forward Current Characteristics

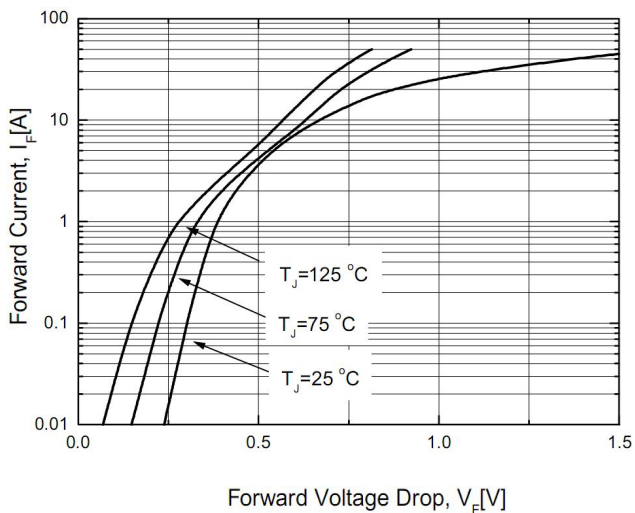


Figure 2. Reverse Leakage Current

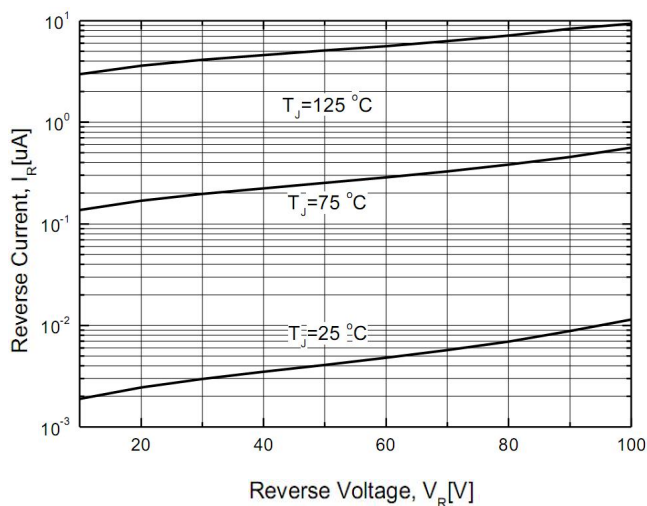


Figure 3. Junction Capacitance

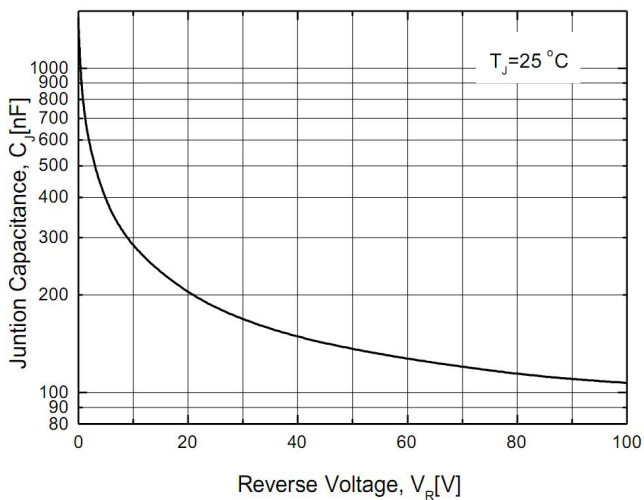
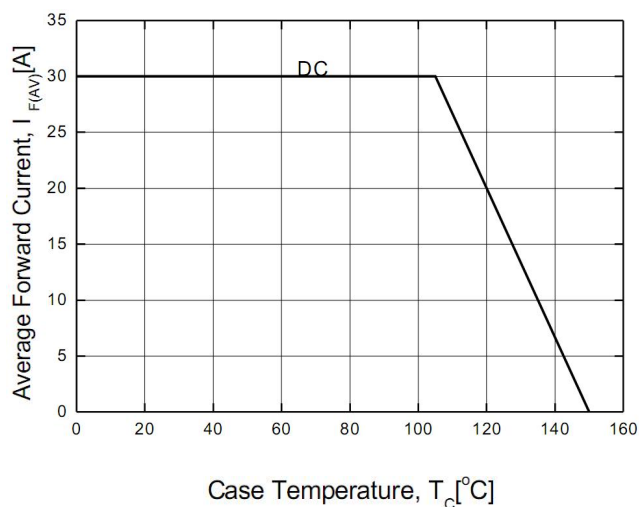


Figure 4. Power Derating



TO-3P Package Dimensions

UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	4.40		5.10	E	15.20		16.20
A1	1.40	1.50	1.70	E1		13.60	
A2	2.10	2.40	2.70	E2		9.60	
b	0.80	1.00	1.20	e	5.15	5.45	5.75
b1	1.90		2.30	L	19.00	20.00	21.00
b2	2.90		3.30	L1	2.50		3.50
C	0.45	0.60	0.75	Q		5.10	
D	19.40	19.90	20.40	Q1		3.90	
D1		13.90					

