



MBRF30150CT

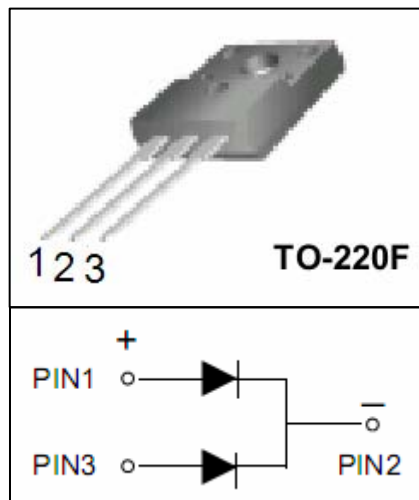
Dual High Voltage Schottky Rectifier

● 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(Tc=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	150	V
V_R	Maximum DC Reverse Voltage	150	V
$I_{F(AV)}$	Average Rectified Forward Current, Tc=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(Tc=25°C unless otherwise noted)

Symbol	Parameter	Max	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case Per Leg	3.2	°C /W

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

Symbol	Parameter	Test Conditions	Min	Max	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	$I_R=100\mu A$	150		V
I_R	Reverse Current	$V_R=150V$ Tc=25°C $V_R=150V$ Tc=125°C		0.1 5	mA
V_F	Forward Voltage	$I_F=15A$ Tc=25°C $I_F=15A$ Tc=125°C $I_F=30A$ Tc=25°C $I_F=30A$ Tc=125°C		0.96 0.84 1.11 1.01	V

Typical Performance Characteristics

Figure 1. Forward Current Characteristics

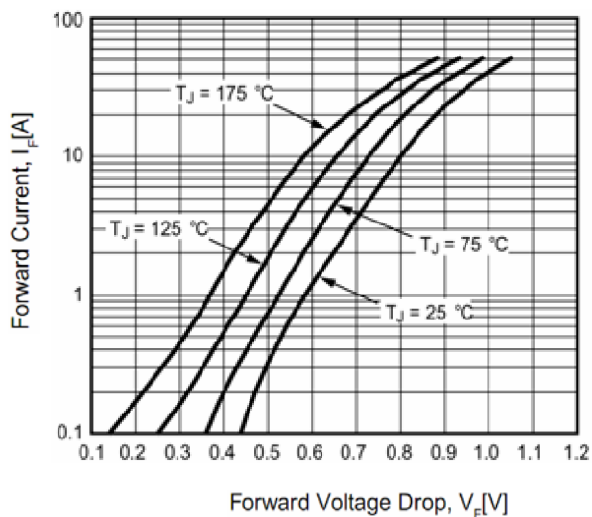


Figure 2. Reverse Leakage Current

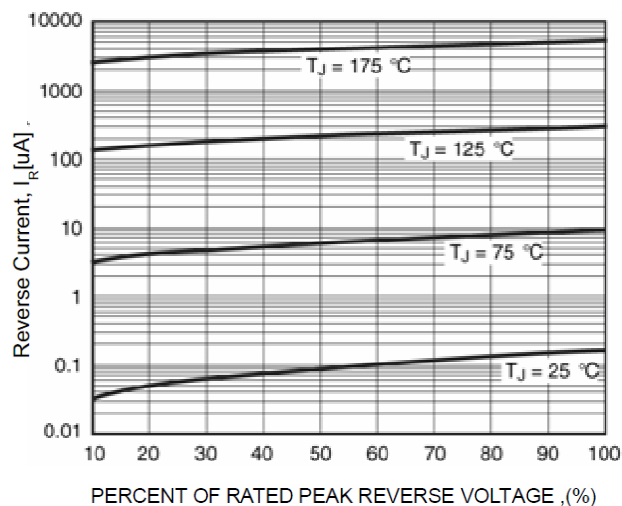


Figure 3. Junction Capacitance

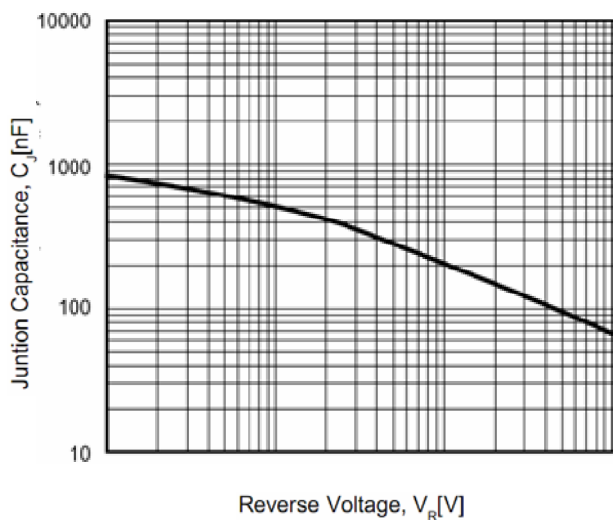
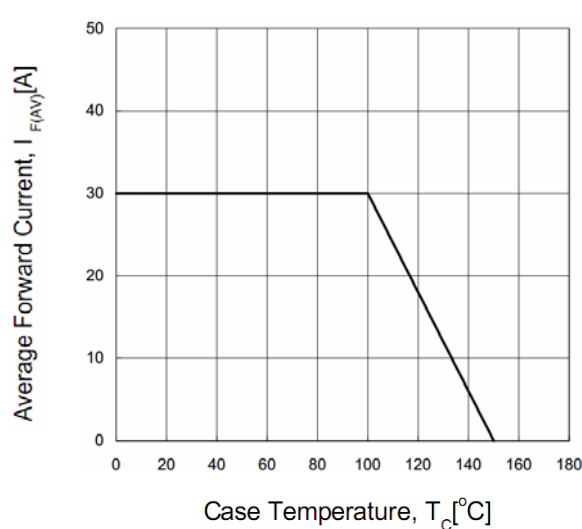


Figure 4. Power Derating



TO-220F Package Dimensions

UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	9.96		10.36	D		2.54	
A1		7.00		D1	1.25		1.35
A2	3.08		3.28	D2	0.70		0.90
A3	9.25		9.65	D3	0.28		0.48
B1	15.70		16.10	E	2.34		2.74
B2	4.50		4.90	E1		0.70	
B3	4.60		5.00	E2		1.0 × 45°	
C	3.20		3.40	E3	0.36		0.65
C1	15.60		16.00	E4	2.55		2.95
C2	9.55		9.95	α (度)		30°	

