

MBR40150FCT/G

Schottky Barrier Rectifiers

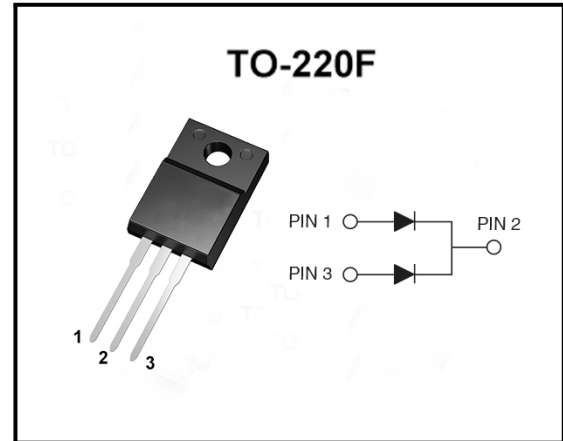
Features

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency

Applications

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters, lighting and on-board DC/DC converters.

Package



Mechanical Data

- Molded Plastic: UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Case: Molded plastic
- Polarity: As marked
- Mounting Position: Any

Ordering information

Order code	Package	Base qty	Delivery mode
MBR40150FCT/G	TO-220F	50 pcs / tube	1000pcs/box 5000pcs/carton

Note: The order code with "G" means using a thick frame.



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Maximum Ratings (@T_A=25°C unless otherwise noted)

Symbol	Parameters	Value	Unit
V _{RRM}	Recurrent Peak Reverse Voltage	150	V
V _{RMS}	Maximum RMS Voltage	105	V
V _{DC}	DC Blocking Voltage	150	V
I _O	Average Forward Rectified Current(Per Leg)	20	A
	Average Forward Rectified Current(Total)	40	
I _{FSM}	Peak forward surge current 8.3 ms single half sine-wave	200	A
T _j	Operating junction temperature	150	°C
T _{STG}	Storage temperature range	-55 to +150	°C
R _{θJC}	Typical Thermal Resistance ⁽¹⁾	4	°C/W

Note:(1)Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (@T_A=25°C unless otherwise noted)

Symbol	Parameters	Test conditions	Typ	Max	Unit
V _F	Forward Voltage	I _F =20A Per leg	0.82	0.92	V
I _R	Reverse Current	T _A =25°C	—	0.02	mA
		T _A =125°C	—	20	mA



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Typical Performance Characteristics($T_A = 25^\circ\text{C}$, unless otherwise noted)

Figure 1:MAX. Forward Current Derating Curve

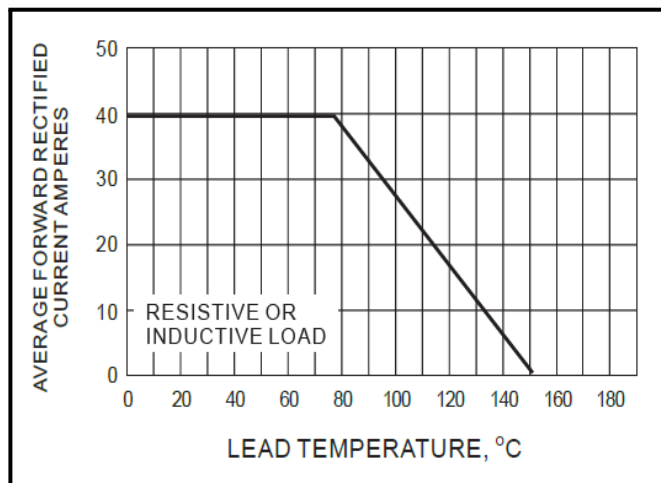


Figure 2:MAX. Non-Repetitive Forward Surge Current

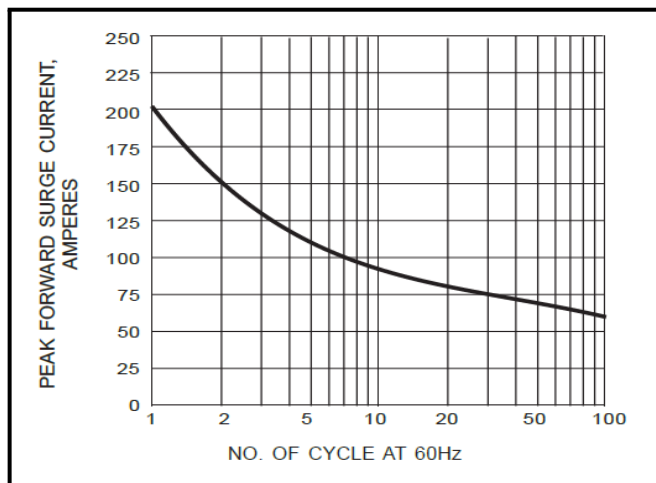


Figure 3:Typical Forward Characteristics

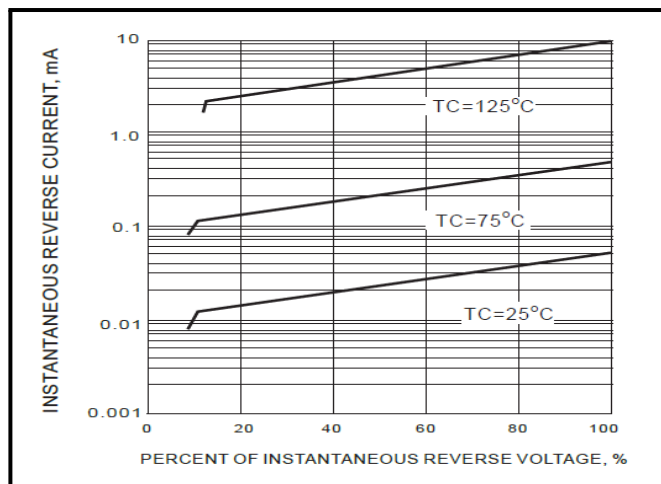
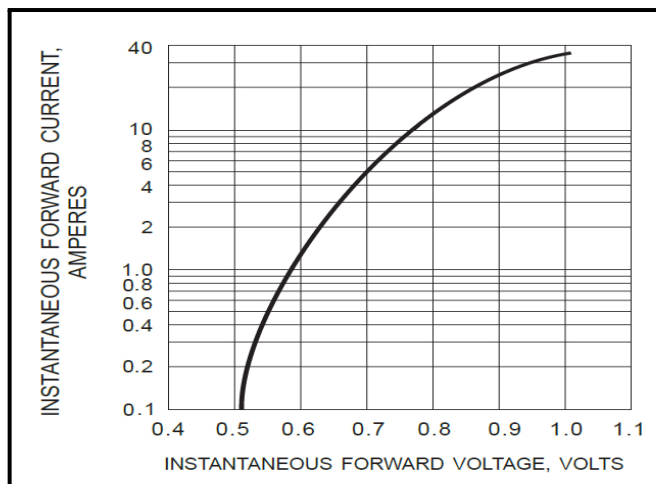


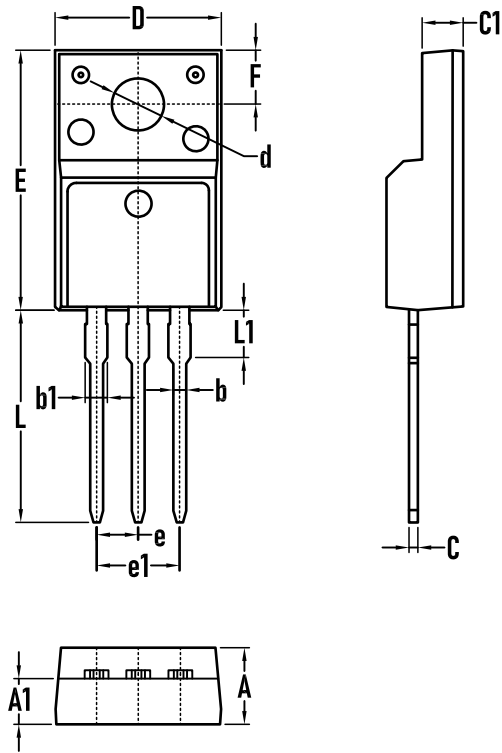
Figure 4:Typical Reverse Characteristics



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Packaging Tape - TO-220F



Symbol	Millimeters		
	MIN.	TYP.	MAX.
A	4.30	4.60	4.80
A1	2.70	2.80	2.90
b	0.70	0.80	0.90
b1	1.20	1.30	1.40
C	0.40	0.50	0.60
C1	2.40	2.60	2.80
D	9.90	10.00	10.20
E	15.20	15.60	16.00
e	2.44	2.54	2.64
e1	4.88	5.08	5.26
F	3.00	3.30	3.60
L	12.70	13.20	13.70
L1	2.70	2.90	3.10
d	3.10	3.20	3.30

