

FME-220B

April, 2007

■General Description

FME-220B is a High Voltage (150V) Schottky Barrier Diode, and has achieved low leakage current and low VF by selecting the best barrier metal.

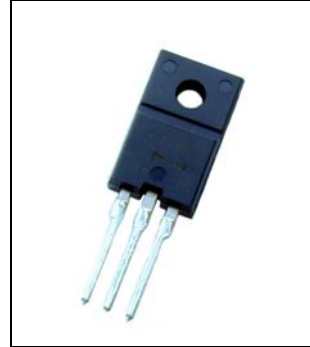
■Applications

- DC-DC converters
- AC adapter
- High frequency rectification circuit

■Features

- High Voltage 150V guarantee
- Steady operation is possible even at the high temperature by the low leakage current.
- Super-high speed & low noise switching.
- Low forward voltage drop.

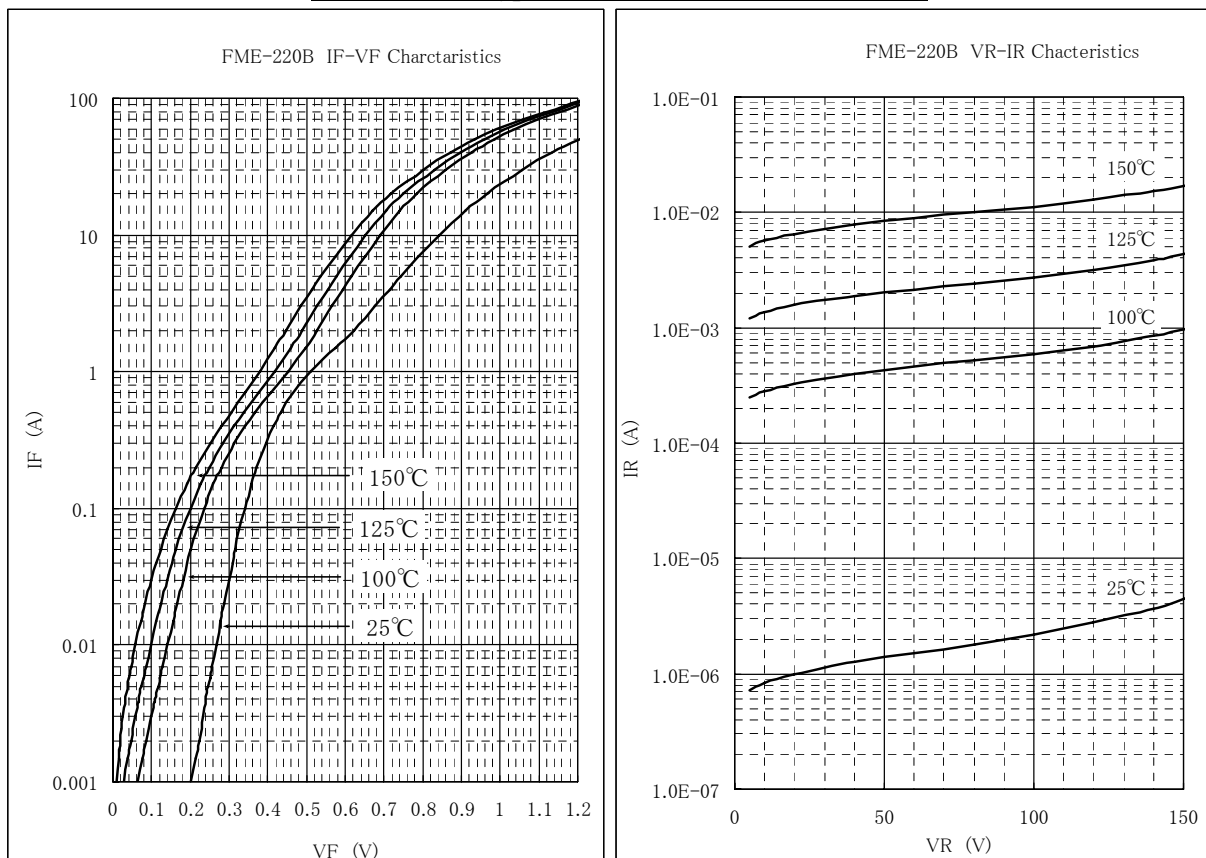
■Package---TO220F



■Key Specifications

Symbol	Unit	Rating	Conditions
V_{RM}	V	150	
V_F	V	0.90	$I_F=10A$
$I_{F(AV)}$	A	20	

Typical Characteristics



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★ Absolute maximum ratings

No.	Parameter	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	150	
2	Peak Reverse Voltage	V_{RM}	V	150	
3	Average Forward Current	$I_{F(AV)}$	A	20	
4	Peak Surge Forward Current	I_{FSM}	A	120	Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	72	$1msec < t < 10msec$
6	Junction Temperature	T_j	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	

No.1, 2, 4 & 5 show ratings per one chip.

★ Electrical characteristics ($T_a=25^{\circ}C$, unless otherwise specified)

No.	Parameter	Symbol	Unit	Rating	Conditions
1	Forward Voltage Drop	V_F	V	0.90 max.	$I_F=10A$
2	Reverse Leakage Current	I_R	μA	200 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	50 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}C/W$	4.0 max.	Between Junction and case

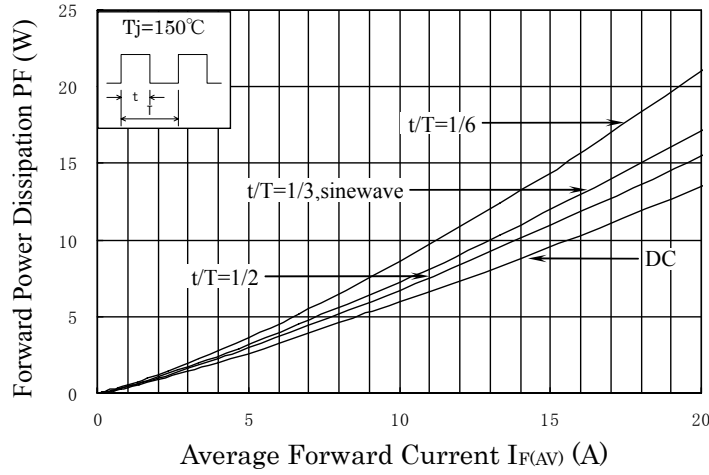
No.1, 2 & 3 show characteristics per one chip.

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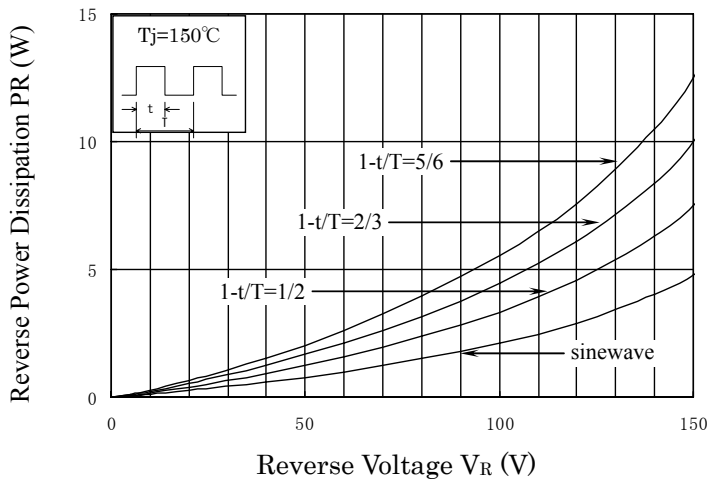
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★ Characteristics

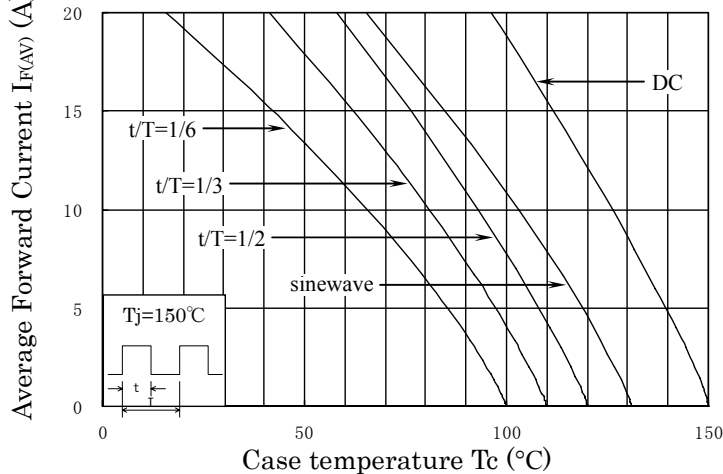
Forward Power Dissipation



Reverse Power Dissipation



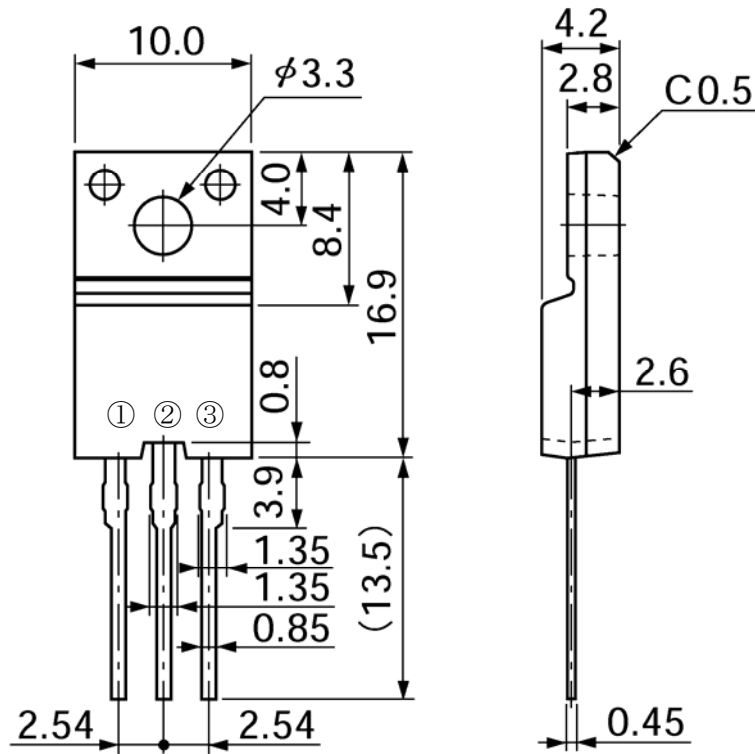
Current Derating $V_R=150\text{V}$



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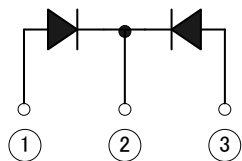
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★ External Dimensions, mm



tolerance: ± 0.2

★ Connection Diagram



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