

FMEN-220A

March, 2006

■General Description

FMEN-220A is a High Voltage (100V) Schottky Barrier Diode, and has achieved low leakage current and low VF by selecting the best barrier metal.

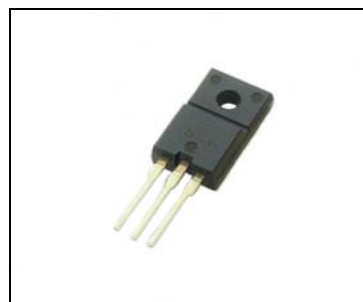
■Applications

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

■Features

- High Voltage 100V guaranteed.
- Steady operation is possible even at the high temperature by the low leakage current.
- Super-high speed & low switching noise.
- Low forward voltage drop.

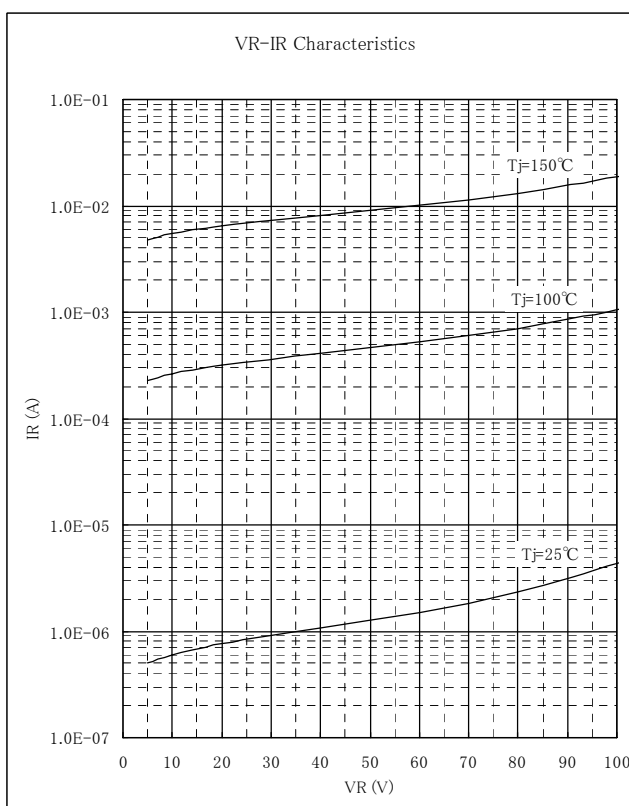
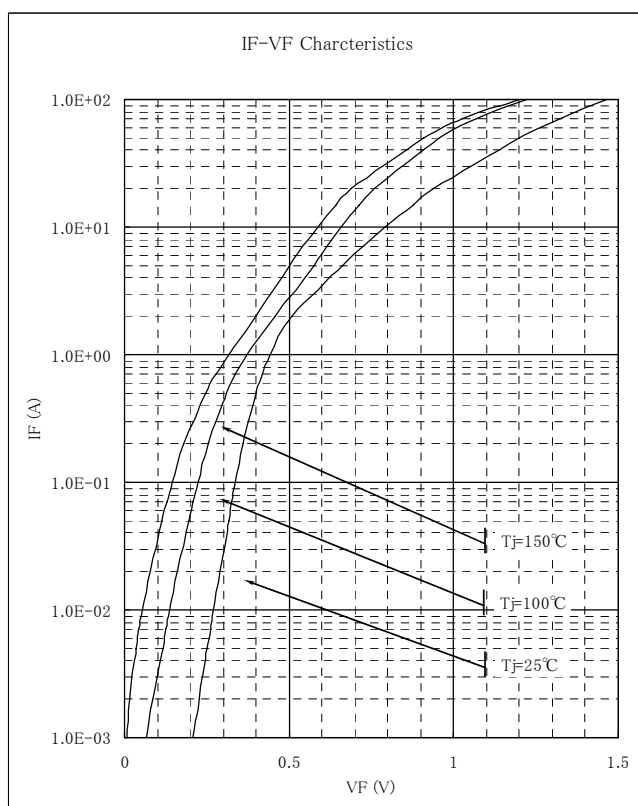
■Package---TO220F



■Key Specifications

Item	Unit	Rating	Conditions
V_{RM}	V	100	
V_F	V	0.85	$I_F=10A$
$I_{F(AV)}$	A	20	

Typical Characteristics



Sanken Electric Co.,Ltd.

<http://www.sanken-ele.co.jp/en/>

D01-010EA-060310

★ Absolute maximum ratings

No.	Parameter	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	100	
2	Peak Reverse Voltage	V_{RM}	V	100	
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	$1msec \leq t \leq 10msec$
6	Junction Temperature	T_j	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	

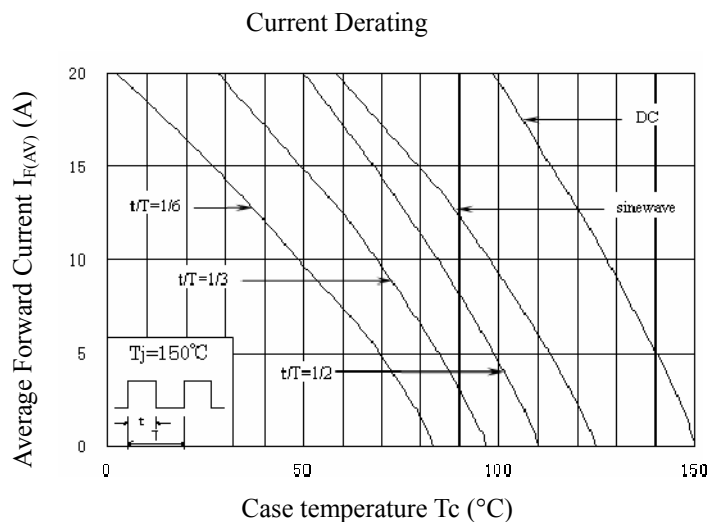
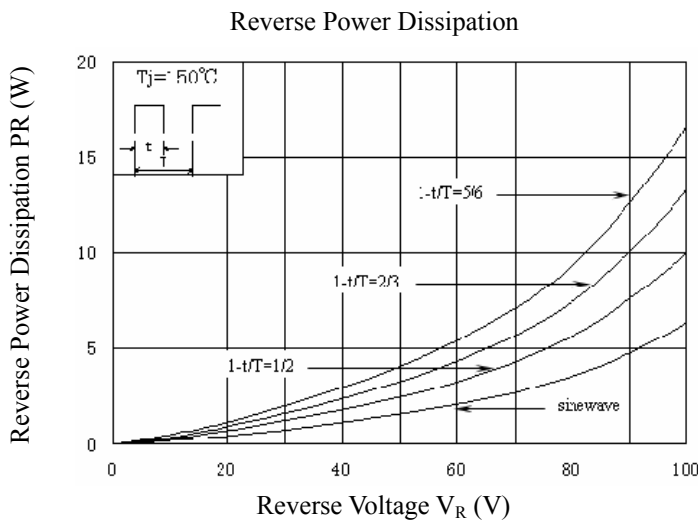
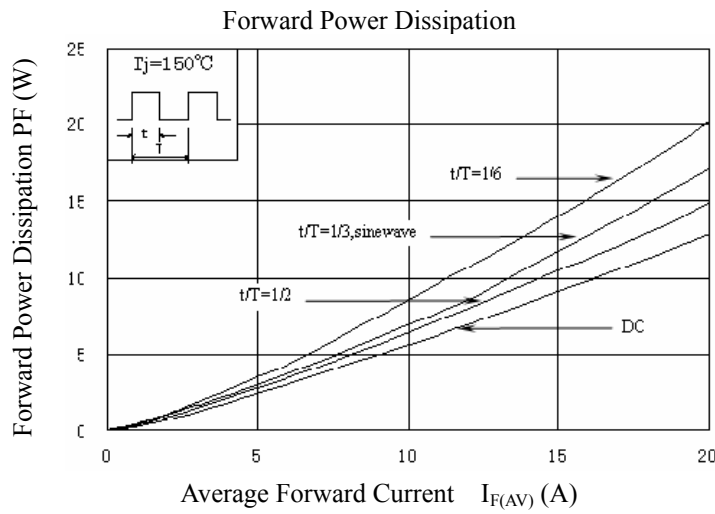
No.1,2,4&5 show ratings per one chip.

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

No.	Parameter	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	0.85 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	100 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.

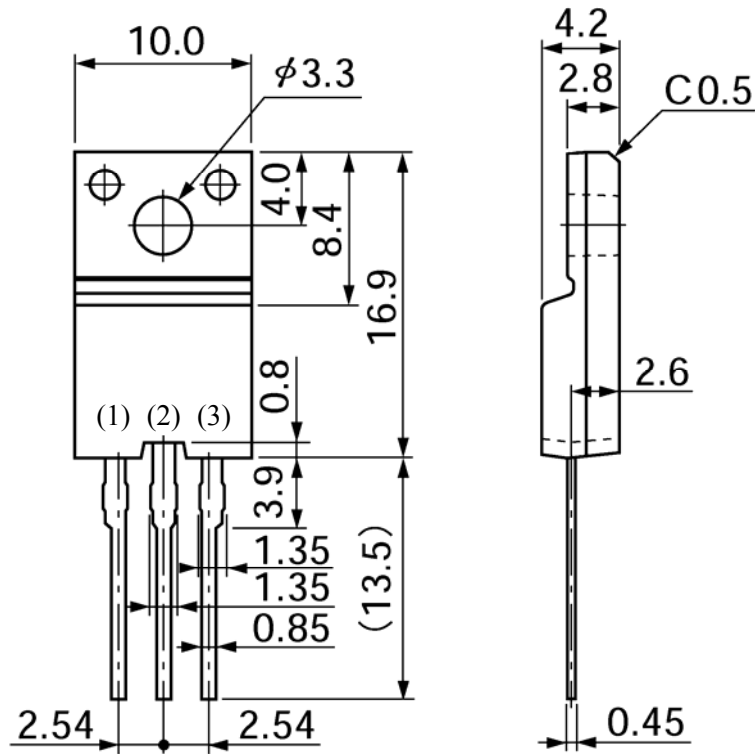
★ Characteristics



FMEN-220A

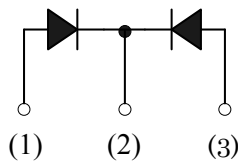
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★ External Dimensions (Unit: mm)



Tolerance: ± 0.2

★ Connection Diagram



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