

FMEN-230A

Mar. 2008

High Voltage Schottky Barrier Rectifier

General Description

FMEN-230A is a High Voltage (100V) Schottky Barrier Diode, and has achieved low leakage current and low VF by selecting the best barrier metal.

Applications

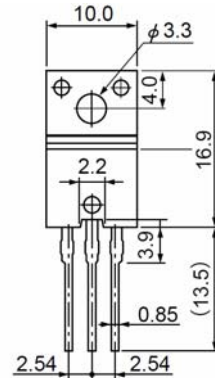
- DC-DC converters
- AC adapter
- High frequency rectification circuit

Features

- High Voltage 100V 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

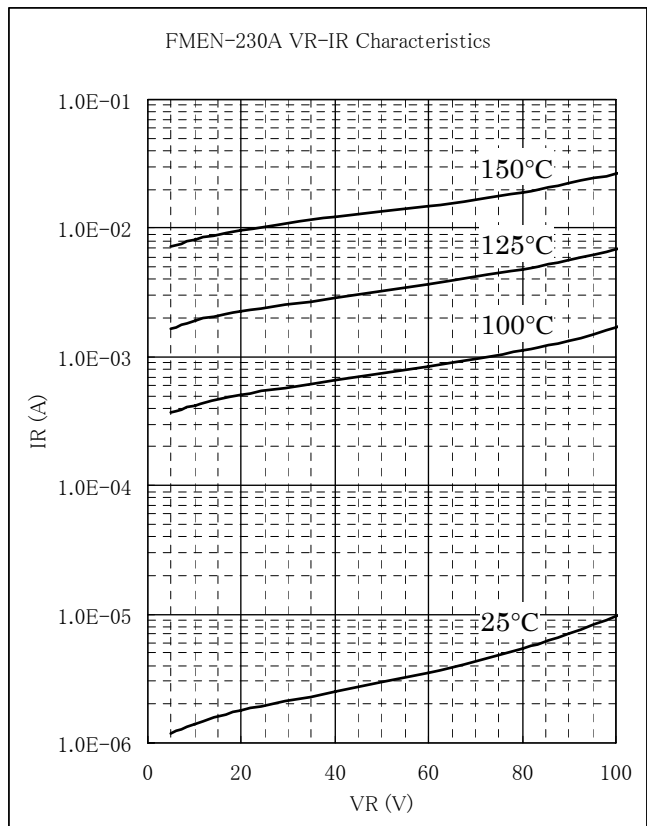
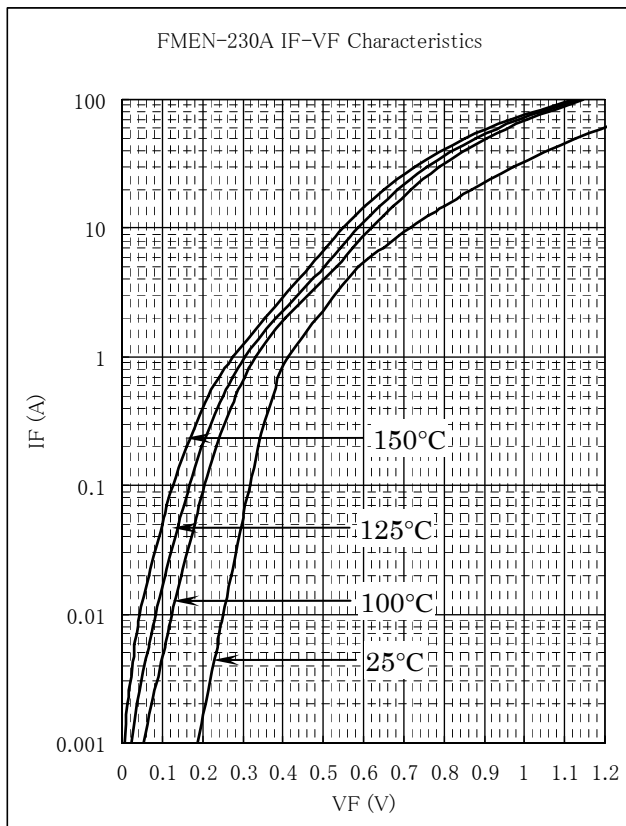
TO220F(3Pin)



Key Specifications

Symbol	Unit	Rating	Conditions
V_{RM}	V	100	
V_F	V	0.85	$I_F=15A$
$I_{F(AV)}$	A	30	

Typical Characteristics



The information included herein is believed to be accurate and reliable. However, SANKEN ELECTRIC CO., LTD assumes no responsibility for its use ; nor for any infringements of patents or other rights of third parties that may result from its use.

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★ 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	30	
4	Peak Surge Forward Current	I_{FSM}	A	150	Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	112.5	$1msec < t < 10msec$
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 (Ta=25°C, unless otherwise specified)

No.	Parameter	Symbol	Unit	Rating	Conditions
1	Forward Voltage Drop	V_F	V	0.85 max.	$I_F=15A$
2	Reverse Leakage Current	I_R	μA	300 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	150 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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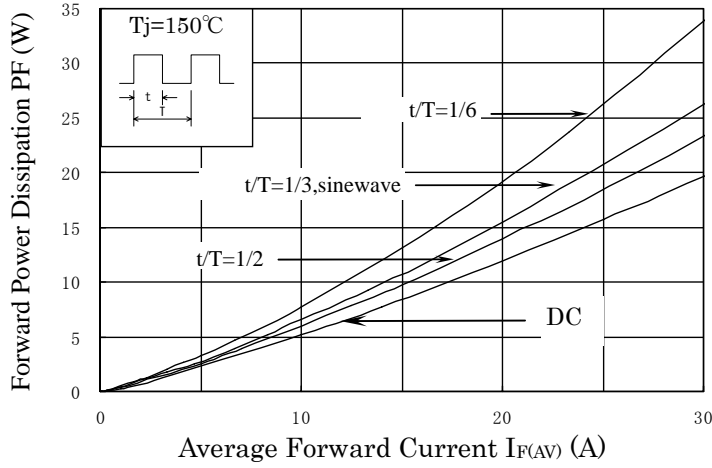
FMEN-230A

Mar. 2008

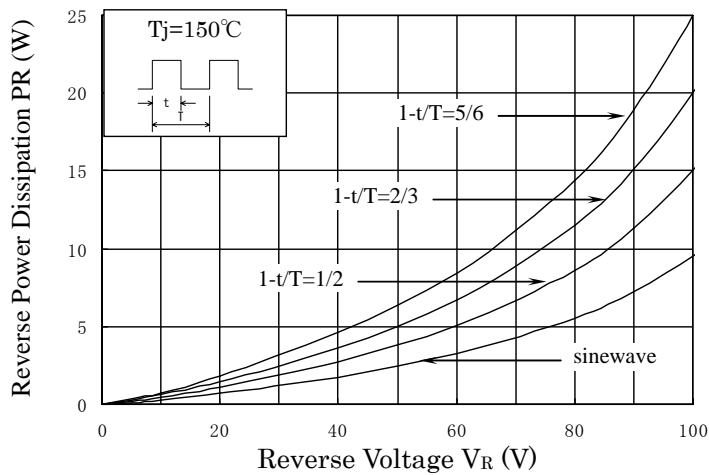
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★ Characteristics

Forward Power Dissipation

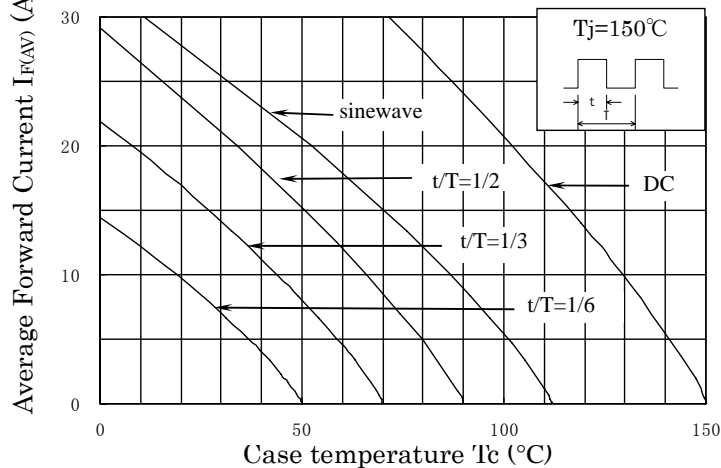


Reverse Power Dissipation



Current Derating

$V_R=150\text{V}$

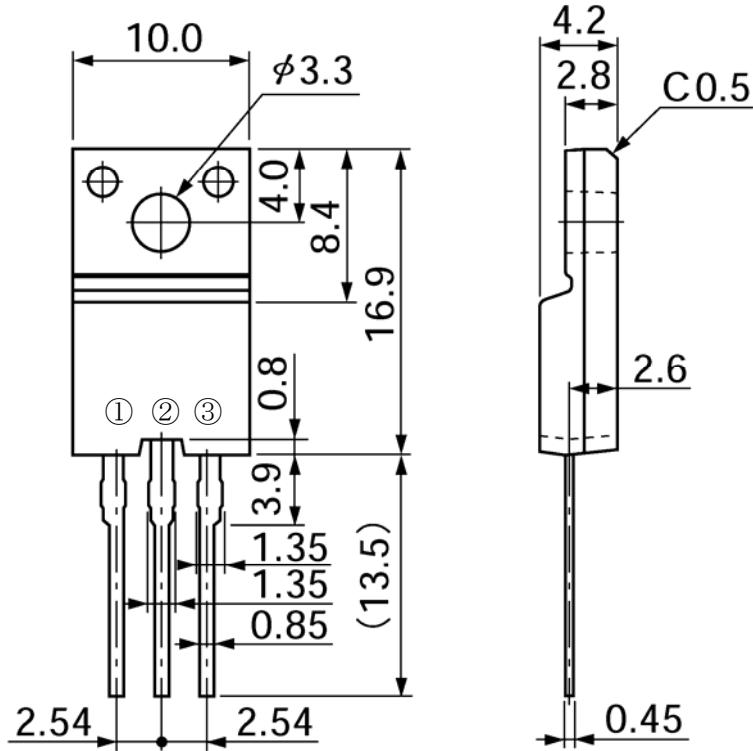


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Mar. 2008

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★ Outline drawings, mm



tolerance: ± 0.2

★ Connection Diagram

