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# **■**General Description

FMEN-210A 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.

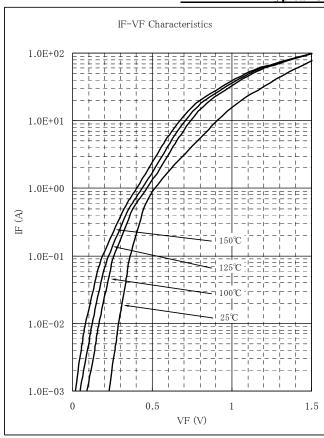
### ■Package---TO220F

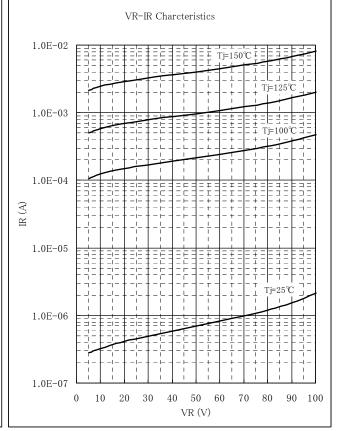


# **■**Key Specifications

Item	Unit	Rating	Conditions
$V_{RM}$	V	100	
$V_{F}$	V	0.85	$I_F=5.0A$
I <sub>F(AV)</sub>	A	10	

#### **Typical Characteristics**







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# \* Absolute maximum ratings

No.	Parameter	Symbol	Unit	Rating	Conditions
1	1 Transient Peak Reverse Voltage		V	100	
2	2 Peak Reverse Voltage		V	100	
3	Average Forward Current	I <sub>F(AV)</sub>	A	10	
4	Peak Surge Forward Current	$I_{FSM}$	A	100	Half sinewave, one shot
5	I <sup>2</sup> t Limiting Value	$I^2t$	$A^2s$	50	$1 msec \le t \le 10 msec$
6	Junction Temperature	$T_{\rm j}$	°C	-40 to +150	
7	Storage Temperature	T <sub>stg</sub>	°C	-40 to +150	

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

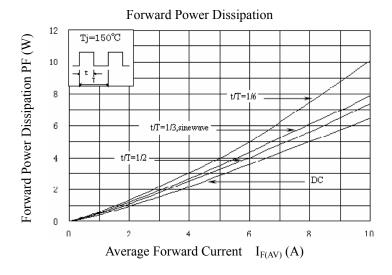
# **★** Electrical characteristics(Ta=25°C, unless otherwise specified)

No.	Parameter	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_{\mathrm{F}}$	V	0.85 max.	I <sub>F</sub> =5.0A
2	Reverse Leakage Current	$I_R$	uA	100 max.	$V_R = V_{RM}$
3	Reverse Leakage Current Under High Temperature	H•I <sub>R</sub>	mA	50 max.	V <sub>R</sub> =V <sub>RM</sub> , T <sub>j</sub> =150°C
4	Thermal Resistance	R <sub>th(j-c)</sub>	°C/W	4.0 max.	Between Junction and case

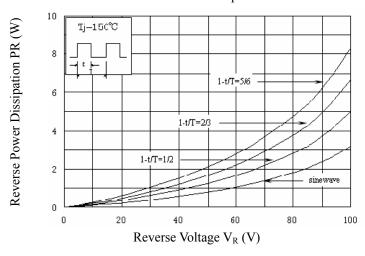
No.1,2,&3 show characteristics per one chip.

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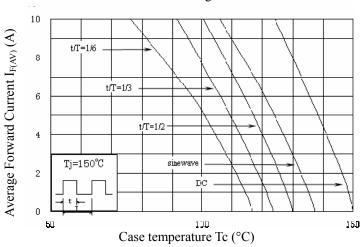
### \* Characteristics



# Reverse Power Dissipation

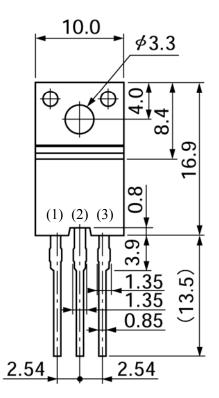


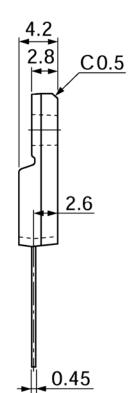
### Current Derating



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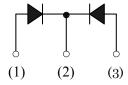
# **★** External Dimensions (Unit: mm)





Tolerance:  $\pm 0.2$ 

# \* Connection Diagram





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# SanKen

# FMEN-210A

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