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# Schottky Barrier Diode FMEN-210A

SanKen

March, 2006

#### ■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

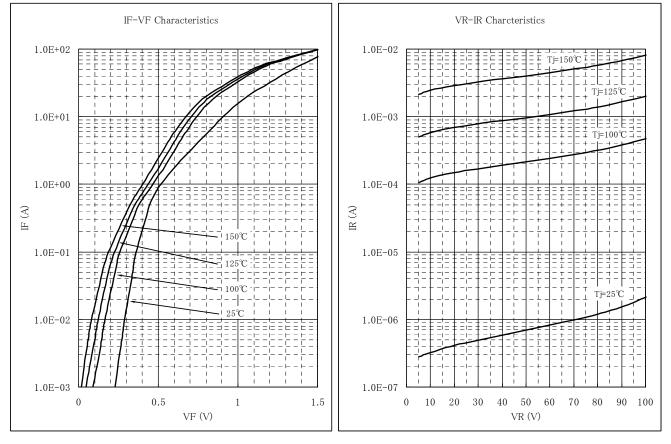
- High Voltage 100V guaranteed.
- Steady operation is possible even at the high temperature by the low leakage current.
- Super-high speed & low switching noise.
- Low forward voltage drop.



#### ■Key Specifications

Item	Unit	Rating	Conditions
V <sub>RM</sub>	V	100	
V <sub>F</sub>	V	0.85	I <sub>F</sub> =5.0A
I <sub>F(AV)</sub>	А	10	

#### **Typical Characteristics**



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March, 2006

#### \* 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	$I_{F(AV)}$	А	10	
4	Peak Surge Forward Current	I <sub>FSM</sub>	А	100	Half sinewave, one shot
5	I <sup>2</sup> t Limiting Value	I <sup>2</sup> t	A <sup>2</sup> s	50	$1 \text{msec} \le t \le 10 \text{msec}$
6	Junction Temperature	Tj	°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.

No.	Parameter	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_{\rm F}$	V	0.85 max.	I <sub>F</sub> =5.0A
2	Reverse Leakage Current	I <sub>R</sub>	uA	100 max.	V <sub>R</sub> =V <sub>RM</sub>
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

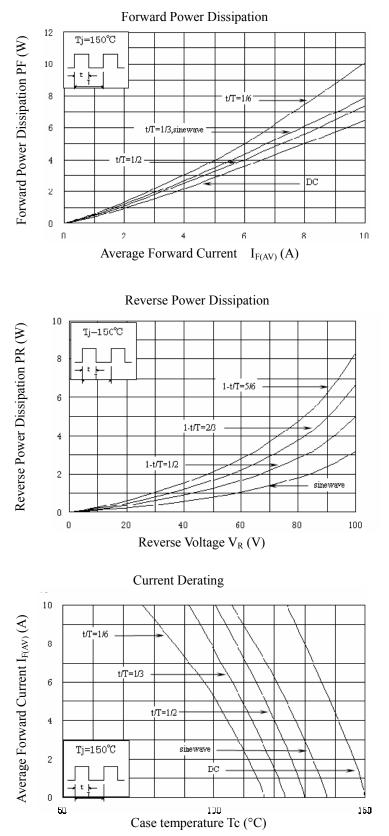
#### **\*** Electrical characteristics(Ta=25°C, unless otherwise specified)

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

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March, 2006

#### \* Characteristics



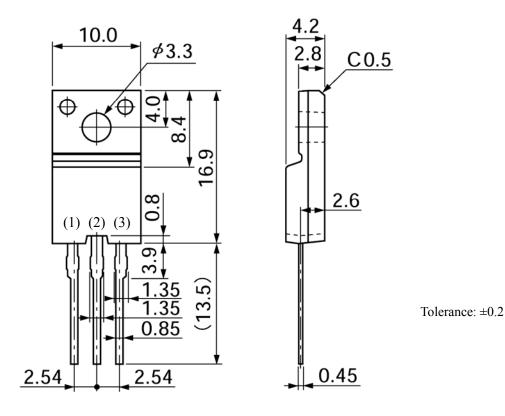
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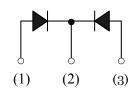


March, 2006

\* External Dimensions (Unit: mm)



\* Connection Diagram



## Schottky Barrier Diode

# FMEN-210A



March, 2006

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March, 2006

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#### Schottky Barrier Diode

# FMEN-210A



March, 2006

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