

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.

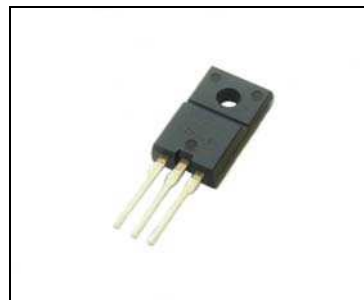
■Applications

- 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.

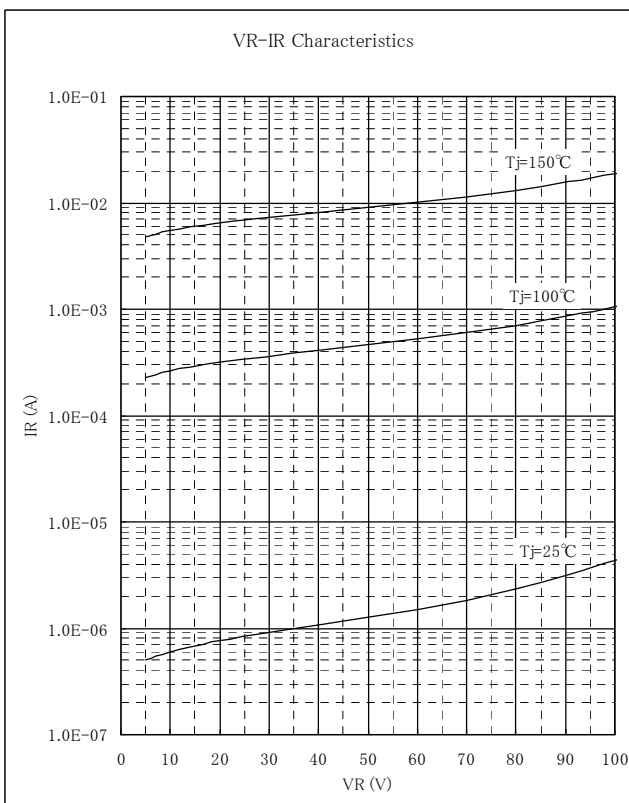
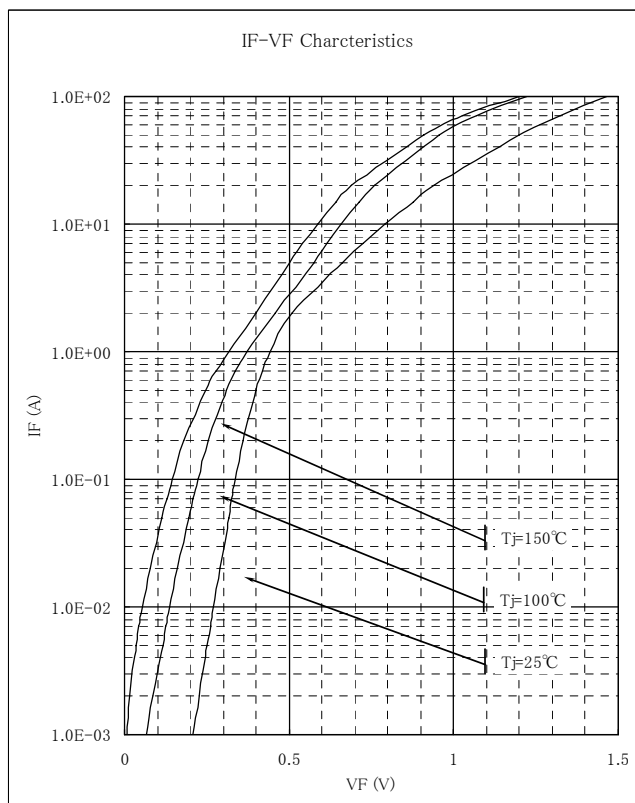
■Package---TO220F



■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	°C	-40 to +150	
7	Storage Temperature	T_{stg}	°C	-40 to +150	

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

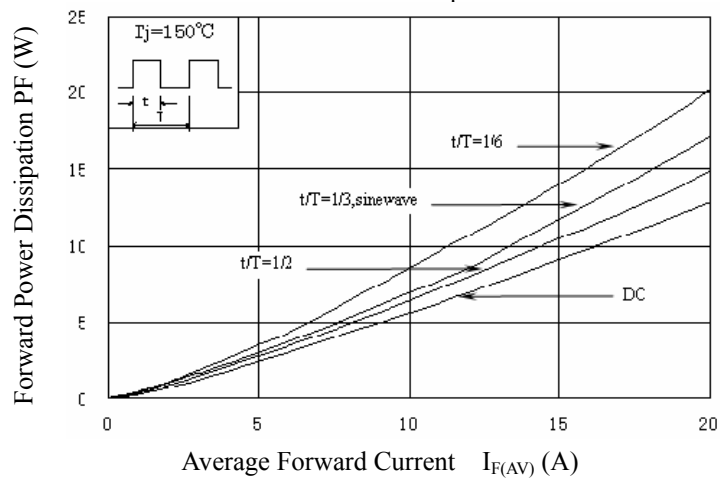
★ Electrical characteristics($T_a=25^\circ C$, unless otherwise specified)

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	$R_{th(j-c)}$	°C/W	4.0 max.	Between Junction and case

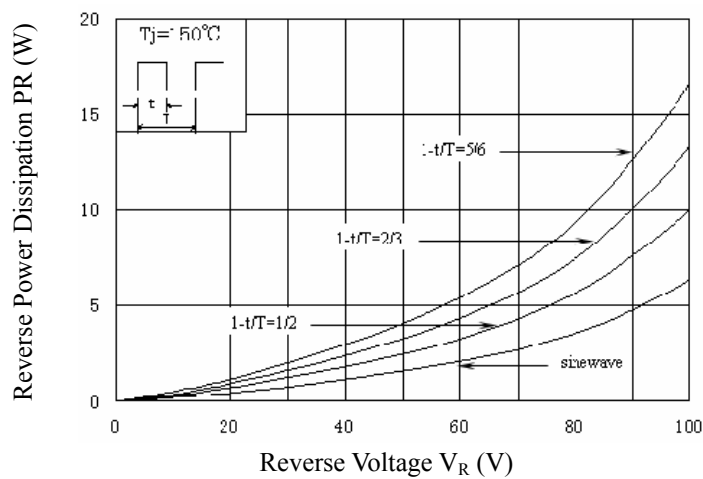
No.1,2,&3 show characteristics per one chip.

★ Characteristics

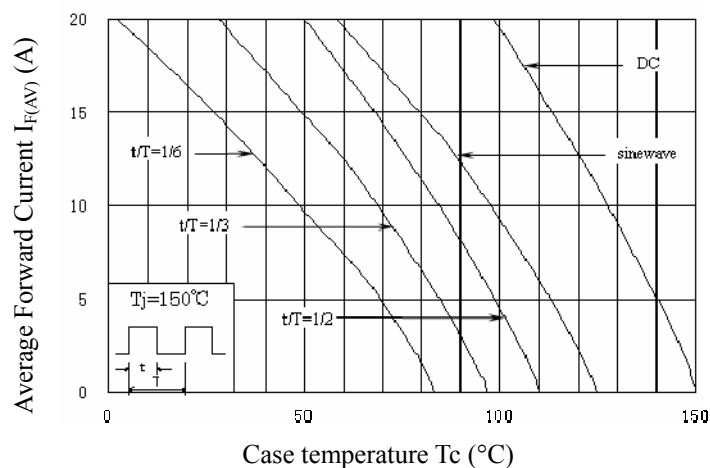
Forward Power Dissipation



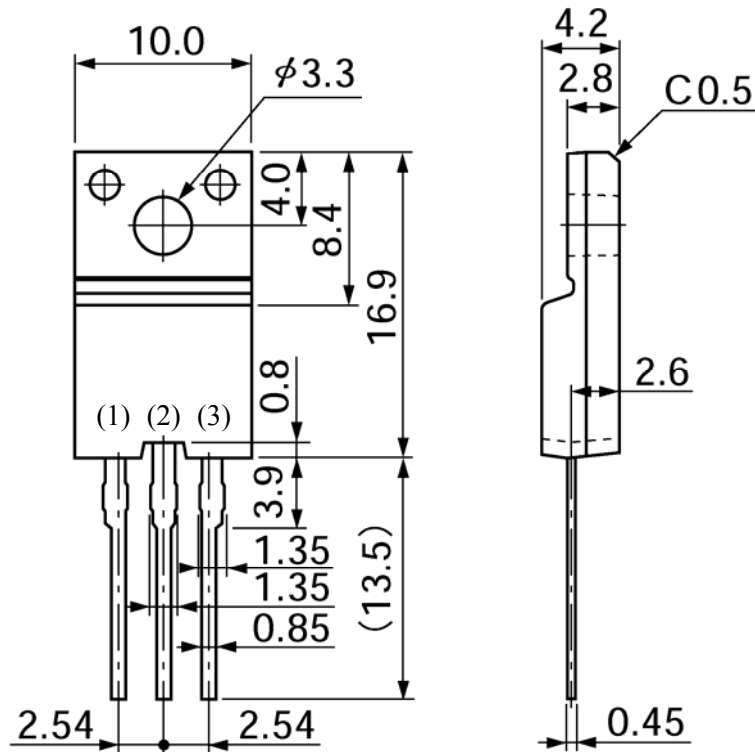
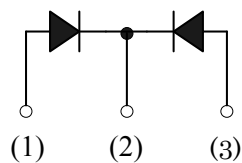
Reverse Power Dissipation



Current Derating



FMEN-220A

★ External Dimensions (Unit: mm)Tolerance: ± 0.2 **★ Connection Diagram**

<Worldwide Contacts>

Asia Pacific

China

Sanken Electric Hong Kong Co., Ltd.

Suite 1026 Ocean Centre, Canton Road, Tsimshatsui, Kowloon, Hong Kong

Tel: 852-2735-5262

Fax: 852-2735-5494

Sanken Electric (Shanghai) Co., Ltd.

Room3202, Maxdo Centre, Xingyi Road 8, Changning district, Shanghai, China

Tel: 86-21-5208-1177

Fax: 86-21-5208-1757

Taiwan Sanken Electric Co., Ltd.

Room 1801, 18th Floor, 88 Jung Shiau East Road, Sec. 2, Taipei 100, Taiwan R.O.C.

Tel: 886-2-2356-8161

Fax: 886-2-2356-8261

India

Saket Devices Pvt. Ltd.

Office No.13, First Floor, Bandal - Dhankude Plaza, Near PMT Depot, Paud Road, Kothrud, Pune - 411 038, India

Tel: 91-20-5621-2340

91-20-2528-5449

Fax: 91-20-2528-5459

Japan

Sanken Electric Co., Ltd. Overseas Sales Headquarters

Metropolitan Plaza Bldg. 1-11-1 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan

Tel: 81-3-3986-6164

Fax: 81-3-3986-8637

Korea

Sanken Electric Korea Co., Ltd.

Mirae Asset Life Bldg. 6F, 168 Kongduk-dong, Mapo-ku, Seoul, 121-705, Korea

Tel: 82-2-714-3700

Fax: 82-2-3272-2145

Singapore

Sanken Electric Singapore Pte. Ltd.

150 Beach Road, #14-03 The Gateway West, Singapore 189720

Tel: 65-6291-4755

Fax: 65-6297-1744

Europe

United Kingdom

Sanken Power Systems (UK) Limited

Pencoed Technology Park, Pencoed, Bridgend CF35 5HY. UK

Tel: 44-1656-869-100

Fax: 44-1656-869-162

North America

United States

Allegro MicroSystems, Inc.

115 Northeast Cutoff, Worcester, Massachusetts 01606, U.S.A.

Tel: 1-508-853-5000

Fax: 1-508-853-3353

Allegro MicroSystems, Inc. (Southern California)

14 Hughes Street, Suite B105, Irvine, CA 92618

Tel: 1-949-460-2003

Fax: 1-949-460-7837

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