

# SD833-09 (3A)

(90V / 3A)

## Schottky barrier diode

### Major characteristics

Characteristics	SD833-09	Units	Condition
V <sub>RRM</sub>	90	V	
V <sub>F</sub>	0.66	V	T <sub>j</sub> =125°C, typ
I <sub>o</sub>	3	A	

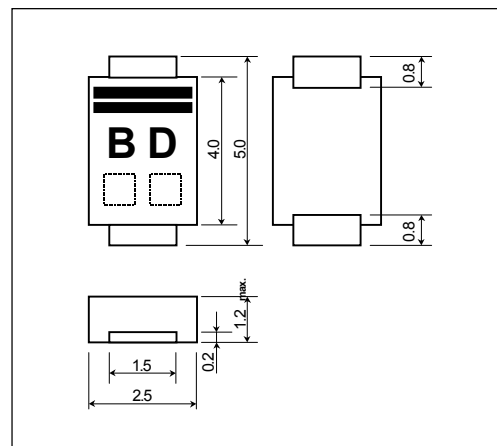
### Features

- Low V<sub>F</sub>
- High voltage 60V
- Low height : 1.2mm max.
- Small mounting area
- Good heat radiation characteristic

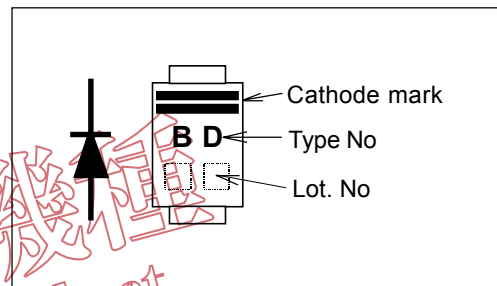
### Applications

- High frequency operation
- DC-DC converters
- AC adapter
- Reverse battery protection
- Oring diode for redundant power system

### Outline drawings, mm



### Marking



### Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak surge reverse voltage	V <sub>FSM</sub>	t <sub>w</sub> =500ns, duty=1/40	100	V
Repetitive peak reverse voltage	V <sub>RRM</sub>		90	V
Average output current	I <sub>o</sub>	Square wave, duty=1/2 T <sub>I</sub> =112°C	3	A
Non-repetitive surge current	I <sub>FSM</sub>	Sine wave 10ms, 1shot	60	A
Operating junction temperature	T <sub>j</sub>		+150	°C
Storage temperature	T <sub>stg</sub>		-40 to +150	°C

- Electrical characteristics (T<sub>c</sub>=25°C Unless otherwise specified)

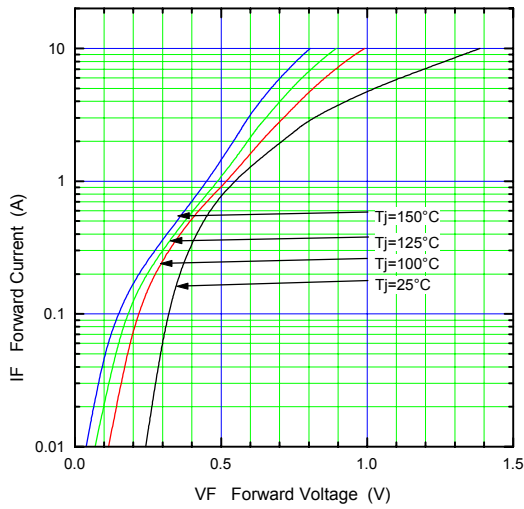
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V <sub>F</sub>	I <sub>FM</sub> =3.0A	0.85	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RRM</sub>	1.0	mA

- Electrical characteristics (T<sub>c</sub>=25°C Unless otherwise specified)

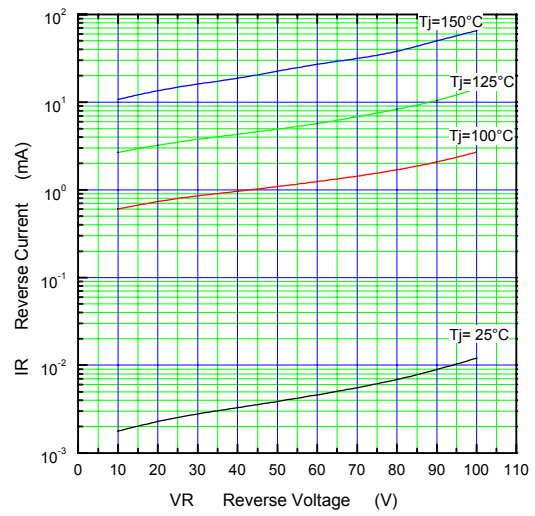
Item	Symbol	Condition	Max.	Unit
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case	12.0	°C/W

Characteristics

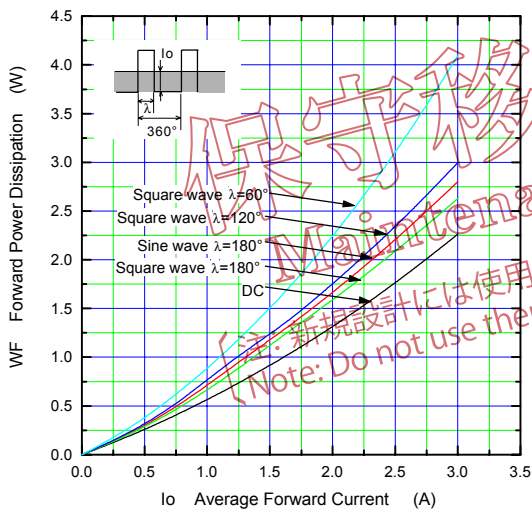
Forward Characteristic (typ.)



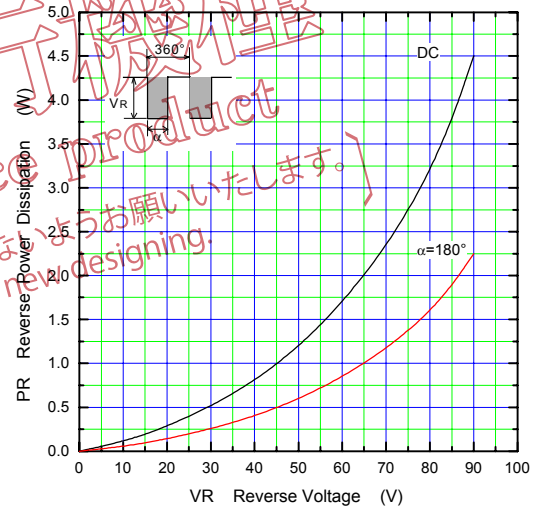
Reverse Characteristic (typ.)



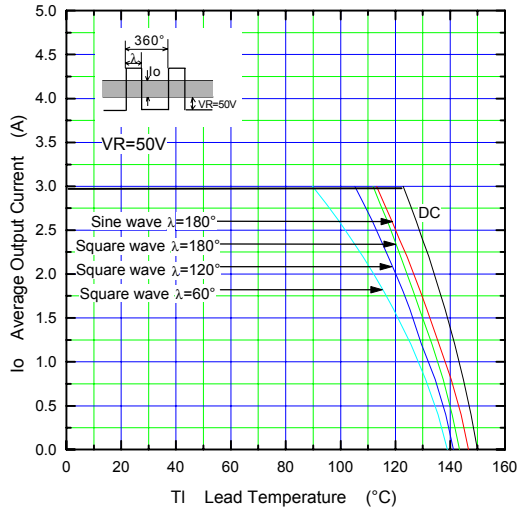
Forward Power Dissipation



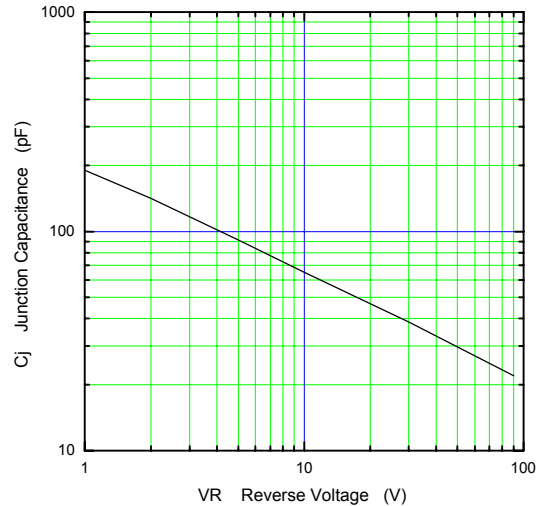
Reverse Power Dissipation

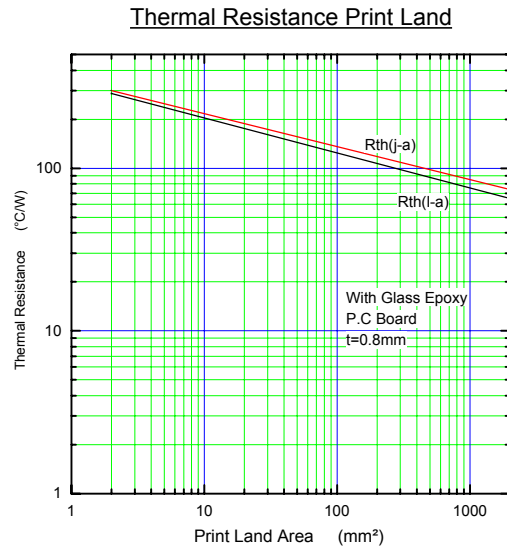
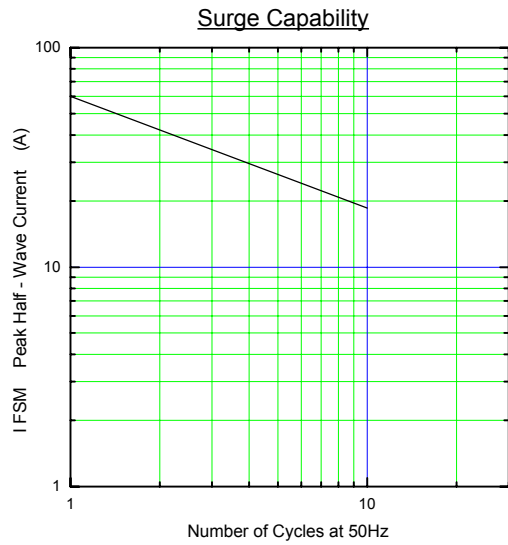


Current Derating (Io-TI)



Junction Capacitance Characteristic (typ.)





保守移行機種  
Maintenance product

〔注: 新規設計には使用されないようお願いいたします。〕  
Note: Do not use them for new designing.