

# SD833-06 (3A)

(60V / 3A)

## Schottky barrier diode

### Major characteristics

Characteristics	SD833-06	Units	Condition
$V_{RRM}$	60	V	
$V_F$	0.5	V	$T_j=125^{\circ}\text{C}$ , typ
$I_o$	3	A	

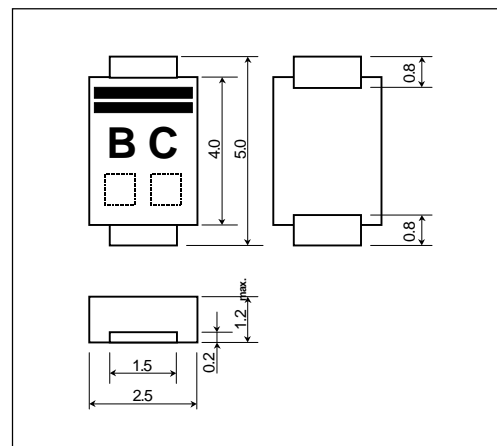
### Features

- Low  $V_F$
- High voltage 60V
- Low height : 1.2mm max.
- Small mounting area
- Good heat radiation characteristic

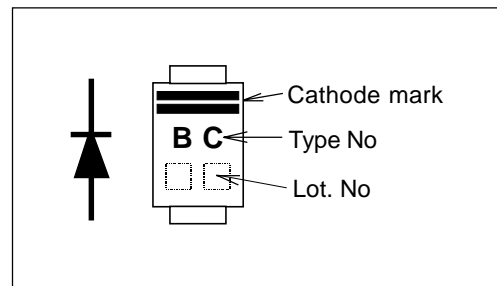
### Applications

- 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	$V_{RSM}$	$t_w=500\text{ns}$ , $\text{duty}=1/40$	60	V
Repetitive peak reverse voltage	$V_{RRM}$		60	V
Average output current	$I_o$	Square wave, $\text{duty}=1/2$ $T_l=121^{\circ}\text{C}$	3	A
Non-repetitive surge current	$I_{FSM}$	Sine wave 10ms, 1shot	60	A
Operating junction temperature	$T_j$		+150	$^{\circ}\text{C}$
Storage temperature	$T_{stg}$		-40 to +150	$^{\circ}\text{C}$

- Electrical characteristics ( $T_c=25^{\circ}\text{C}$  Unless otherwise specified )

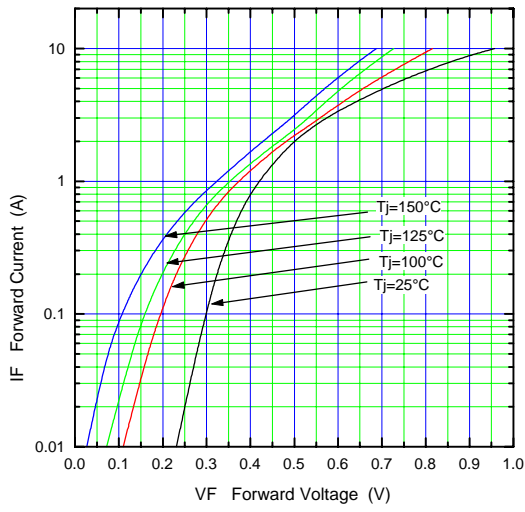
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	$V_F$	$I_{FM}=2.5\text{A}$	0.58	V
Reverse current	$I_R$	$V_R=V_{RRM}$	1.0	mA

- Electrical characteristics ( $T_c=25^{\circ}\text{C}$  Unless otherwise specified )

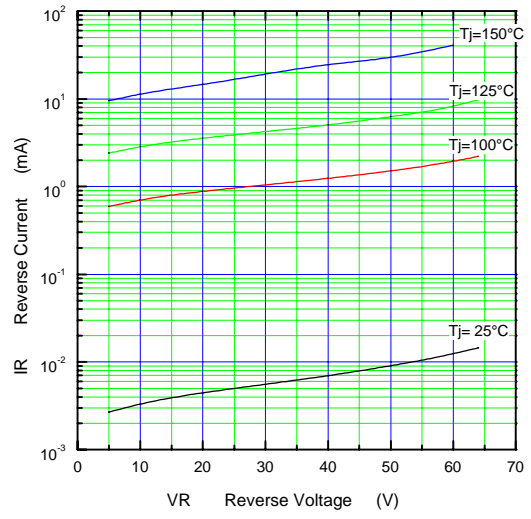
Item	Symbol	Condition	Max.	Unit
Thermal resistance	$R_{th(j-c)}$	Junction to case	12.0	$^{\circ}\text{C}/\text{W}$

Characteristics

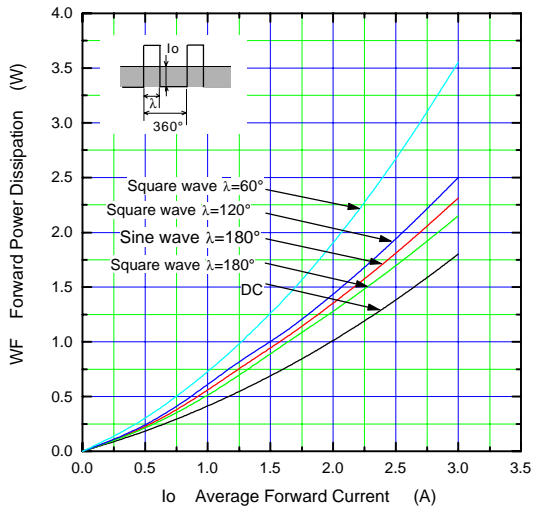
Forward Characteristic (typ.)



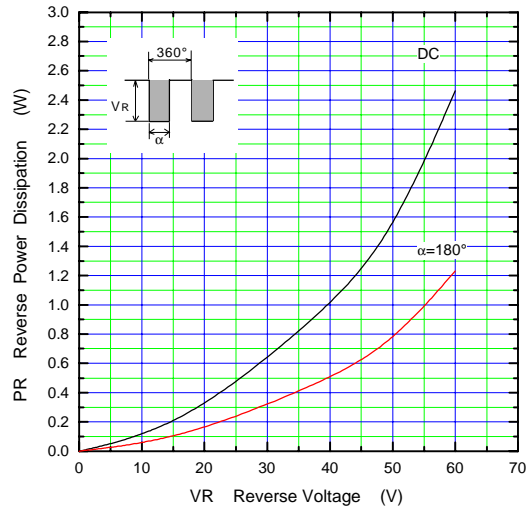
Reverse Characteristic (typ.)



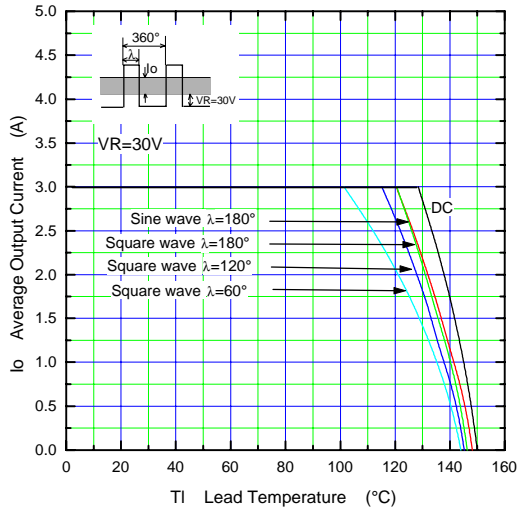
Forward Power Dissipation



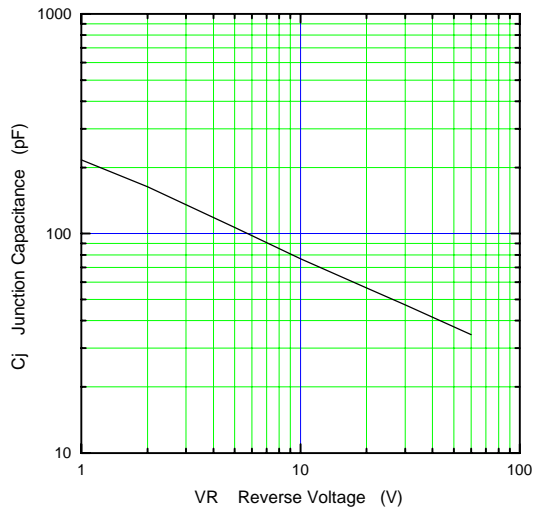
Reverse Power Dissipation



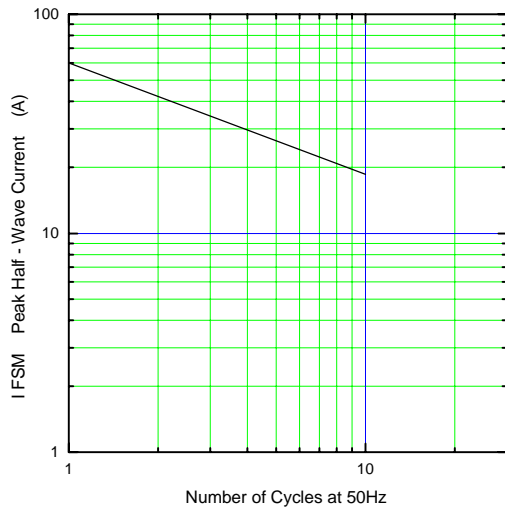
Current Derating ( $I_o$ - $T_I$ )



Junction Capacitance Characteristic (typ.)



Surge Capability



Thermal Resistance Print Land

