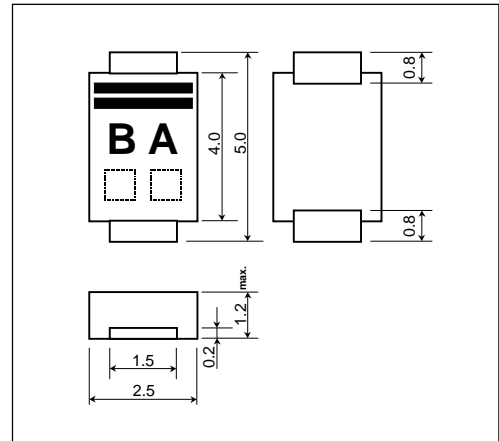


SD833-03

(30V / 3.0A)

SCHOTTKY BARRIER DIODE

■ Outline drawings, mm



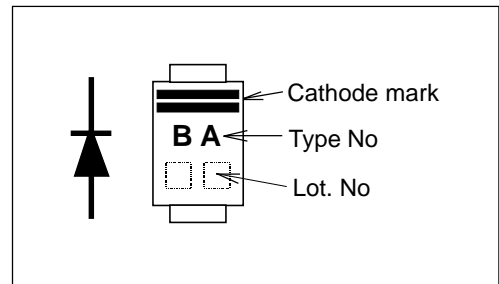
■ Features

- Surface-mount device
- Low V_F
- Super high speed switching
- High reliability by planer design

■ Applications

- High speed switching

■ Marking



■ Maximum ratings and characteristics

- Absolute maximum ratings

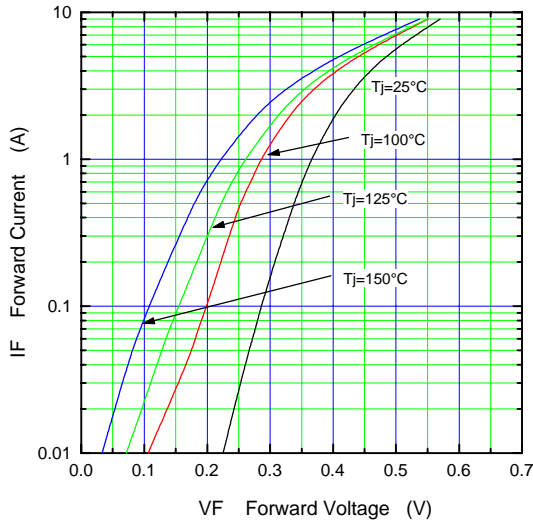
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		30	V
Non-repetitive peak reverse voltage	V_{RSM}	$t_w=500\text{ns}$, $\text{duty}=1/40$	30	V
Average output current	I_o	square wave $\text{duty}=1/2$ $T_I=127^\circ\text{C}$	3.0	A
Surge current	I_{FSM}	Sine wave 10ms, 1shot	70	A
Operating junction temperature	T_j		-40 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

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

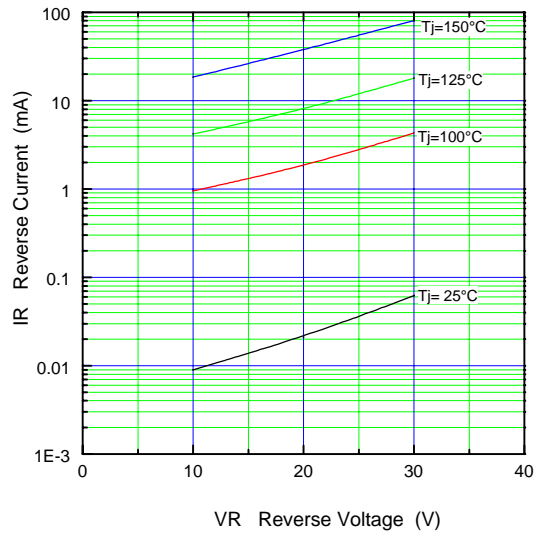
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=3.0\text{A}$	0.46	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	1.0	mA
Thermal resistance	$R_{th(j-l)}$	Junction to lead	12	$^\circ\text{C}/\text{W}$

■ Characteristics

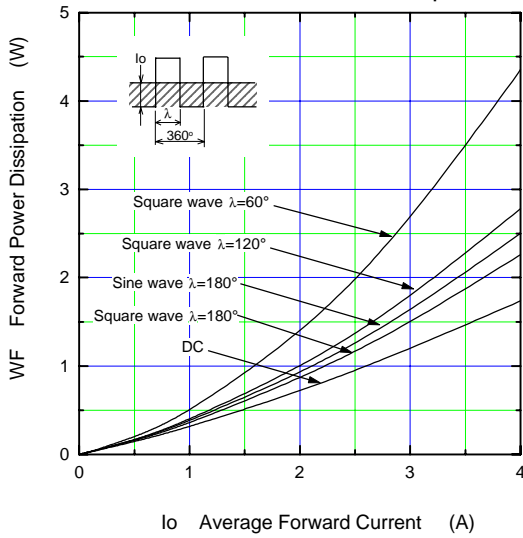
Forward Characteristic (typ.)



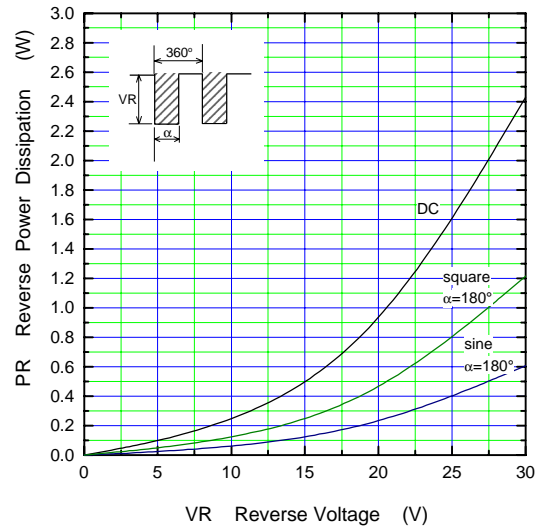
Reverse Characteristic (typ.)



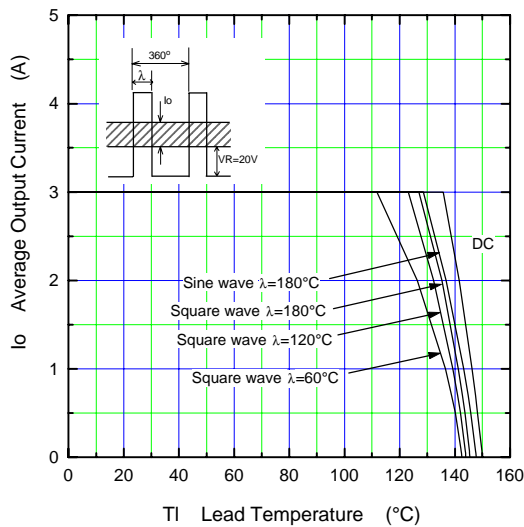
Forward Power Dissipation



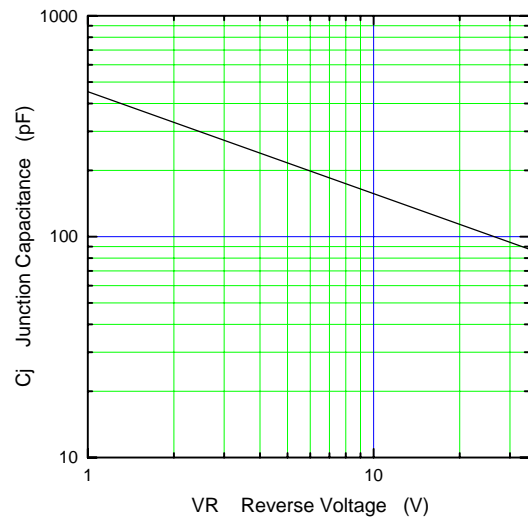
Reverse Power Dissipation



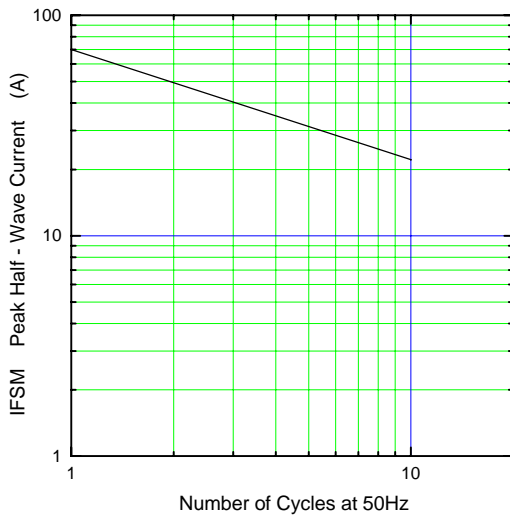
Current Derating (Io-TI)



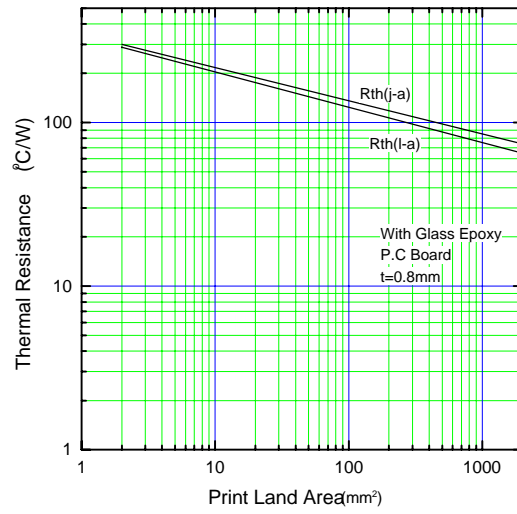
Junction Capacitance Characteristic (typ.)



Surge Capability



Thermal Resistance Print Land



Transient Thermal Impedance

