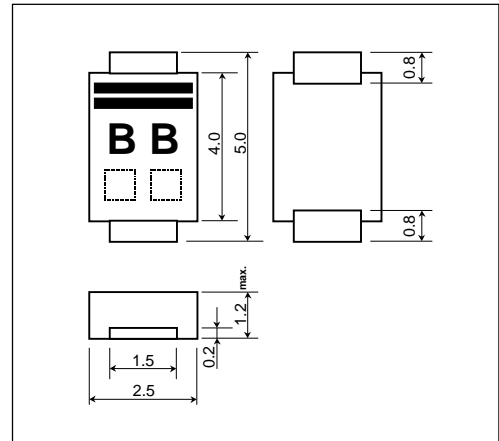


SD833-04

(40V / 3.0A)

SCHOTTKY BARRIER DIODE

Outline drawings, mm



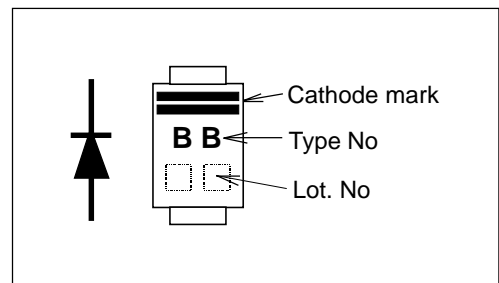
Features

- 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

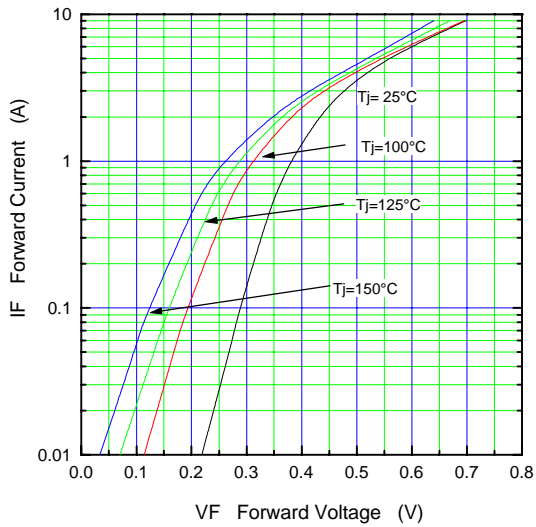
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		40	V
Non-repetitive peak reverse voltage	V_{RSM}	$t_w=500ns$, $duty=1/40$	40	V
Average output current	I_o	square wave $duty=1/2$ $T_I=122^{\circ}C$	3.0	A
Surge current	I_{FSM}	Sine wave 10ms, 1shot	70	A
Operating junction temperature	T_j		-40 to +150	$^{\circ}C$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}C$

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

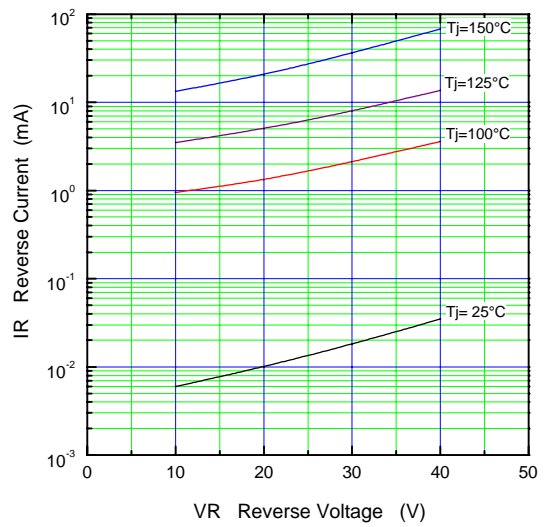
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=3.0A$	0.51	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	1.0	mA
Thermal resistance	$R_{th(j-l)}$	Junction to lead	12	$^{\circ}C/W$

■ Characteristics

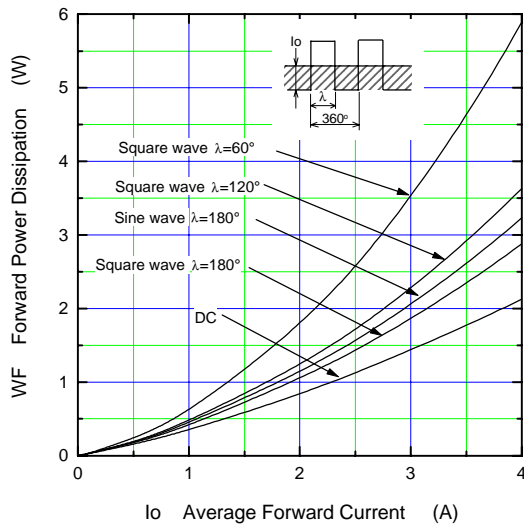
Forward Characteristic (typ.)



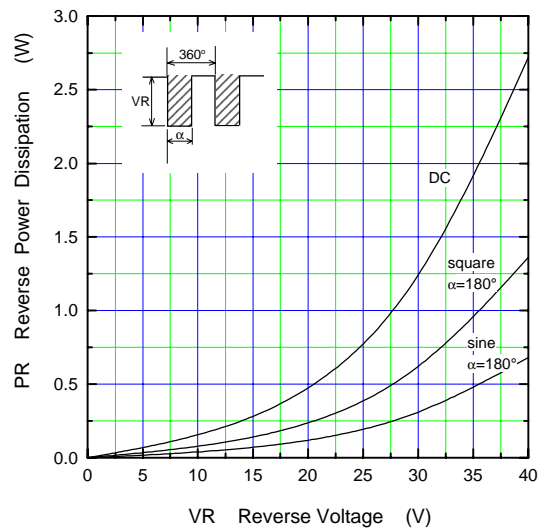
Reverse Characteristic (typ.)



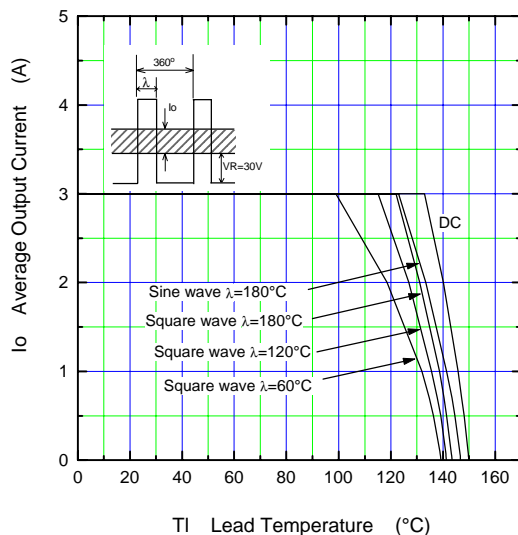
Forward Power Dissipation



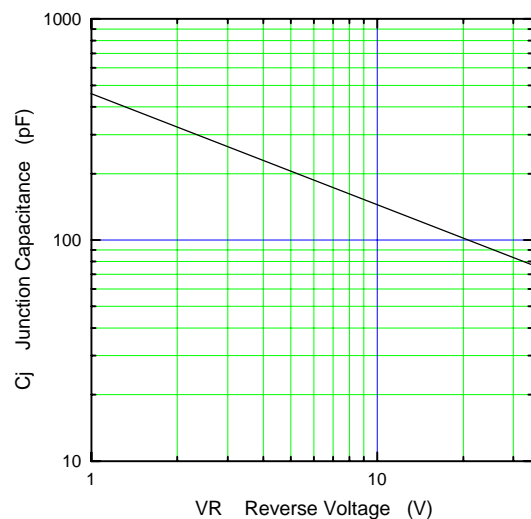
Reverse Power Dissipation



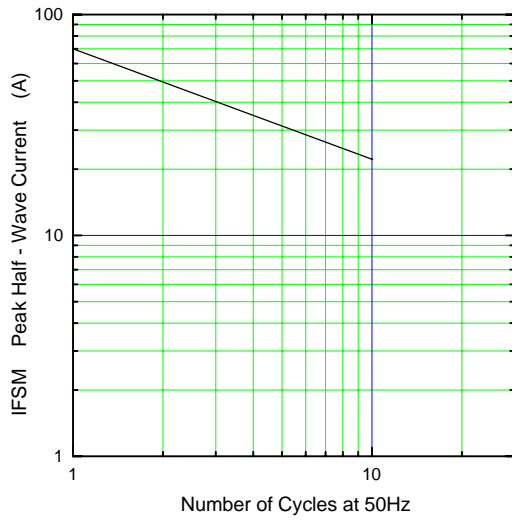
Current Derating (I_o - T_I)



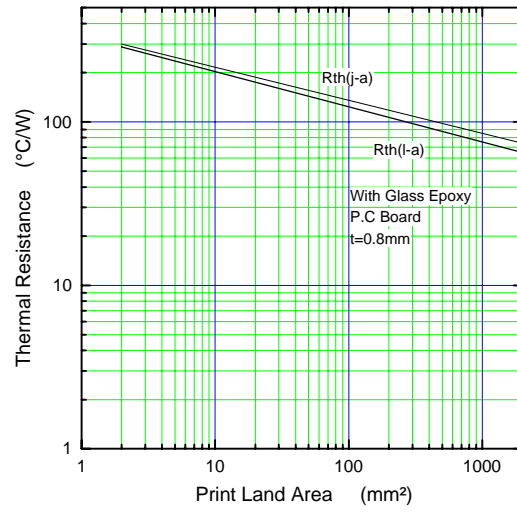
Junction Capacitance Characteristic (typ.)



Surge Capability



Thermal Resistance Print Land



Transient Thermal Impedance

