

Applications

- Portable equipment battery applications
- SMPS applications

Features

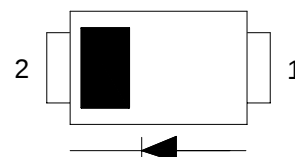
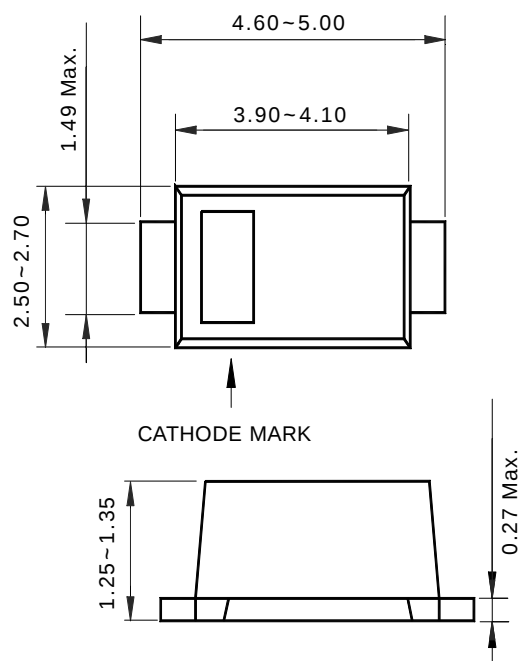
- Very low forward voltage: $V_F = 0.40 \text{ Max.}$
- Low switching loss
- High reliability

Ordering Information

Type No.	Marking	Package Code
SDB330	3A30	SOD-106

Outline Dimensions

unit : mm



PIN Connections

1. Anode
2. Cathode

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Peak reverse voltage	V_{RM}	30	V
Reverse voltage	V_R	30	V
Forward current	I_F	3.0	A
Peak surge forward current (Non-repetitive 60Hz sine wave)	I_{FSM}	30	A
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

Electrical Characteristics

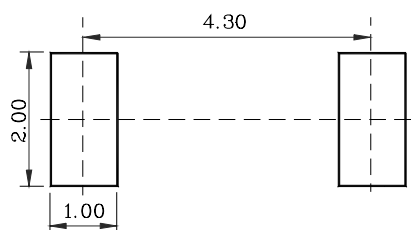
(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F ¹⁾	$I_F=3A$	-	0.35	0.40	V
Reverse current	I_R	$V_R=30V$	-	-	5	mA
Total capacitance	C_T	$V_R=10V, f=1MHz$	-	160	-	pF
Thermal resistance	R_{th}	Junction to ambient ²⁾	-	-	76	°C/W

1) Pulse test : $t_p \leq 380 \mu s$, Duty cycle $\leq 2\%$

2) Device mounted on glass epoxy PCB (recommanderable minimum solder land)

※ Recommend PCB solder land [Unit : mm]



Electrical Characteristic Curves

Fig. 1 $I_F - V_F$

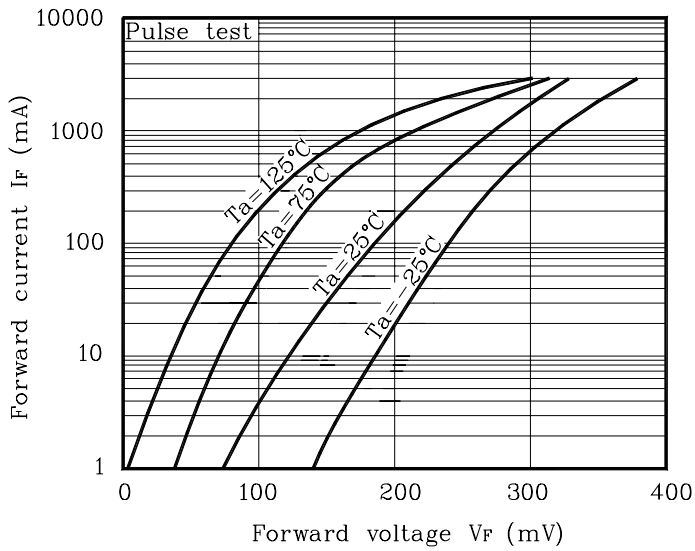


Fig. 2 $I_R - V_R$

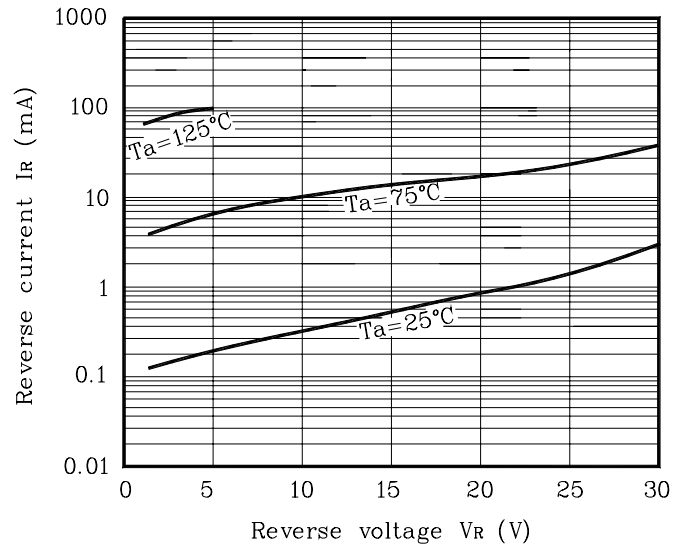


Fig. 3 $C_T - V_R$

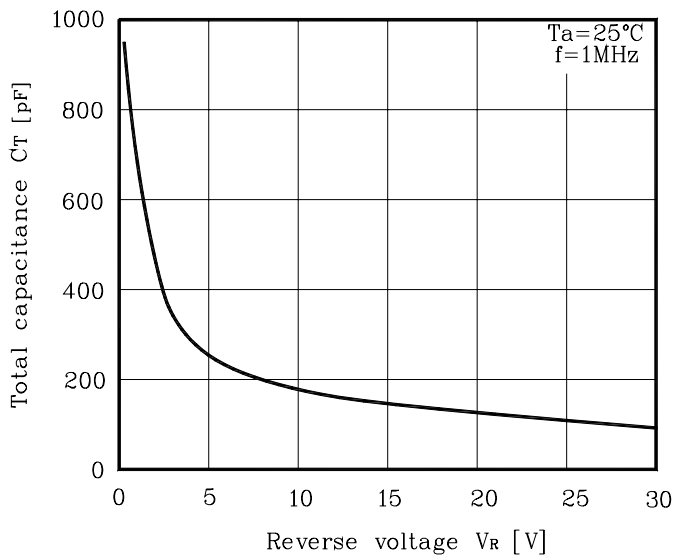


Fig. 4 $P_F - I_F$

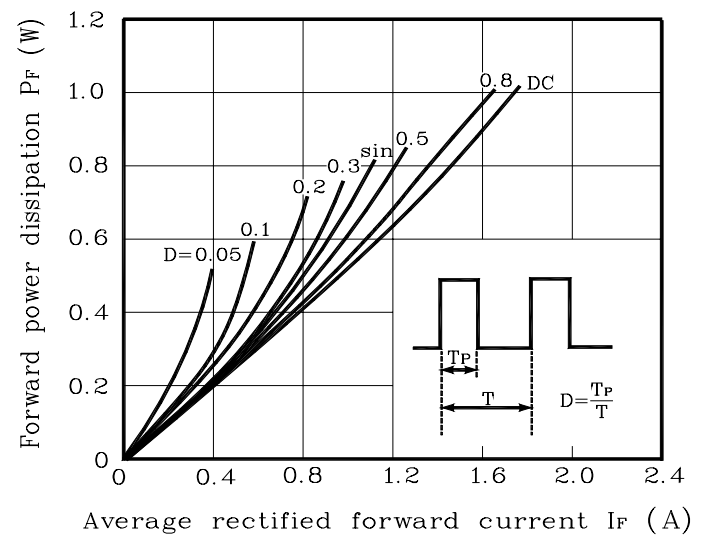


Fig. 5 $I_{FSM} - \text{Number of cycle}$

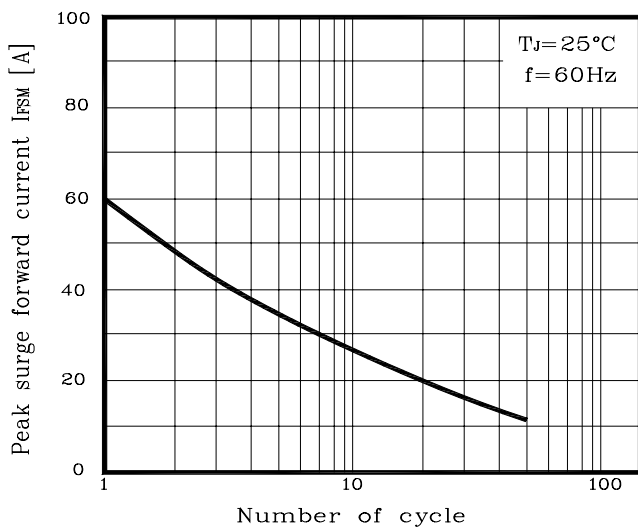
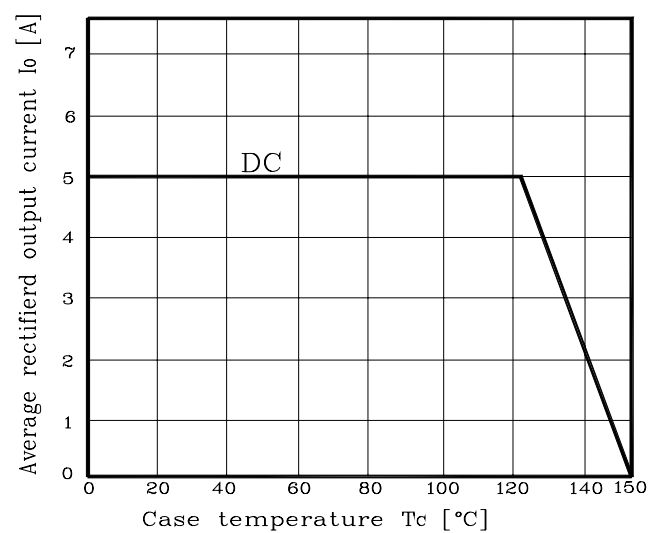


Fig. 6 $I_O \text{ derating} - T_C$



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