

Applications

- Portable equipment battery applications
- SMPS applications

Features

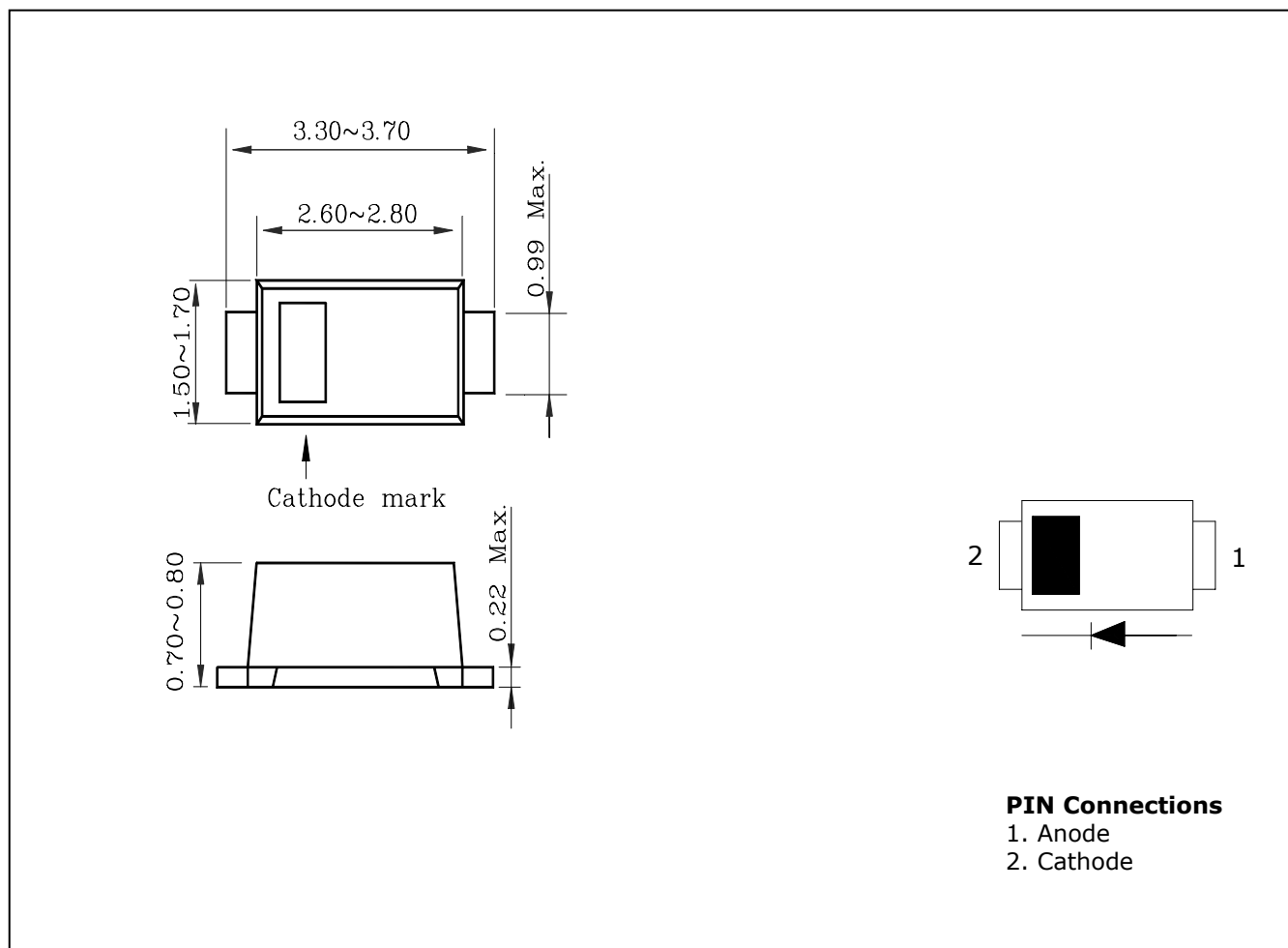
- Low power rectified
- High reliability
- Low forward voltage: $V_F=0.5V$ Typ. @ $I_F=1A$
- Low reverse current: $I_R=4 \mu A$ Typ. @ $V_R=40V$

Ordering Information

Type No.	Marking	Package Code
SDB1040	1A4	SOD-123

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}	40	V
Reverse voltage	V_R	40	V
Average rectified forward current	I_F	1.0	A
Non-repetitive peak surge forward current (Non-repetitive 60Hz)	I_{FSM}	30	A
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

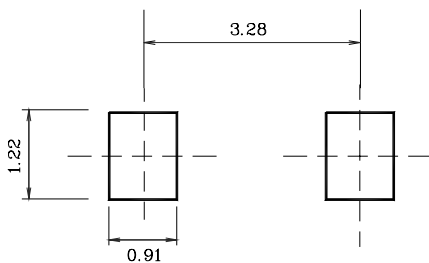
Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F^{**}	$I_F=1A$	-	0.5	0.55	V
Reverse current	I_R	$V_R=40V$	-	-	200	μA
Total capacitance	C_T	$V_R=10V, f=1MHz$	-	50	-	pF

※ Pulse test : $t_p \leq 250 \mu s$, Duty cycle $\leq 2\%$

※ Recommend PCB solder land (Unit : mm)



Electrical Characteristic Curves

Fig. 1 $I_F - V_F$

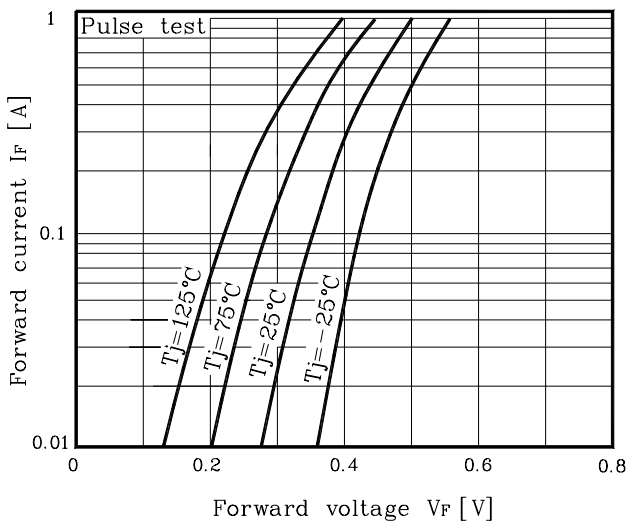


Fig. 2 $I_R - V_R$

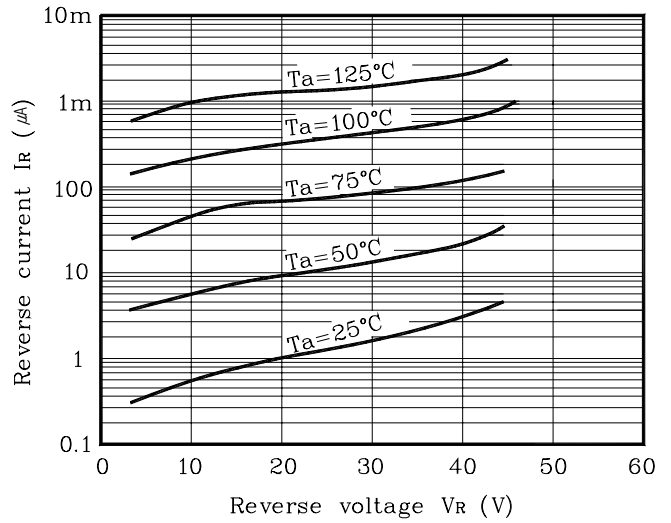


Fig. 3 $C_T - V_R$

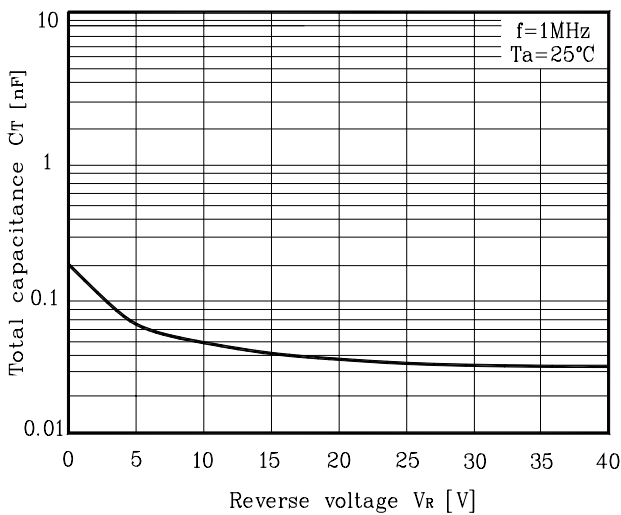
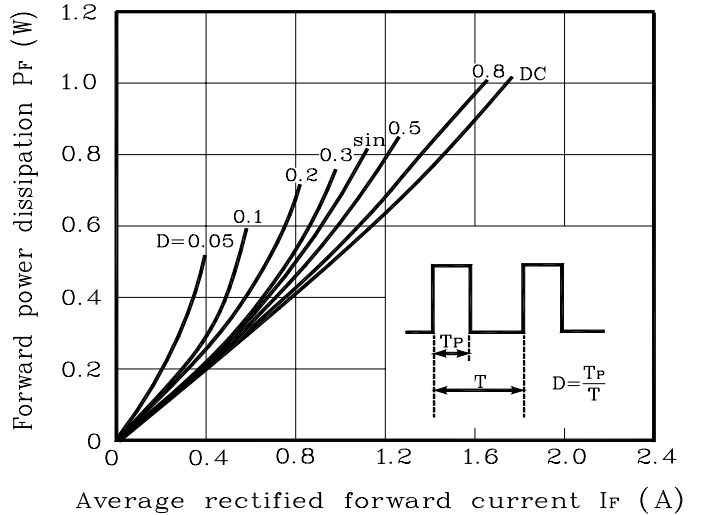


Fig. 4 $P_F - I_F$



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