

Applications

- Portable equipment battery applications
- SMPS applications

Features

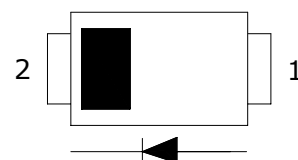
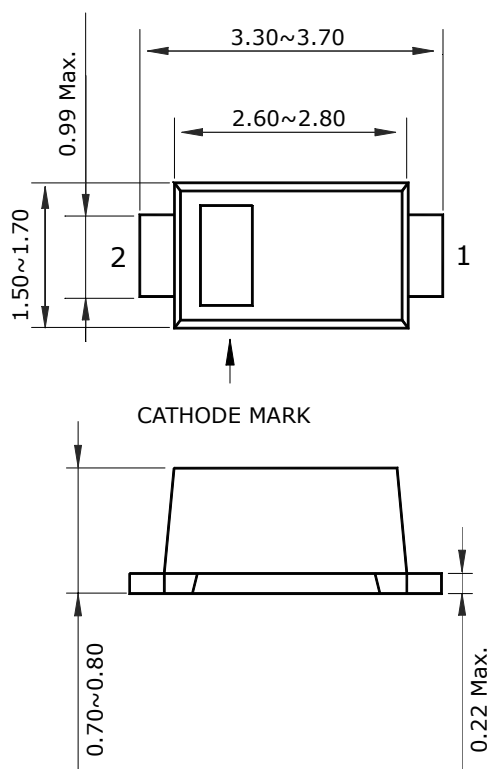
- Low switching loss
- High reliability
- Very low reverse current: $I_R=0.15\text{mA Max. @ } V_R=30\text{V}$
- Low forward voltage: $V_F=0.49\text{V Max. @ } I_F=1\text{A}$

Ordering Information

Type No.	Marking	Package Code
SDB130B	1A3B	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}	30	V
Reverse voltage	V_R	30	V
Forward current	I_F	1.0	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

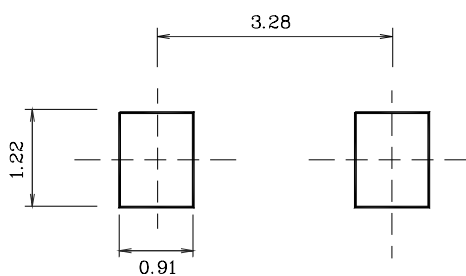
Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F ¹⁾	$I_F=1A$	-	-	0.49	V
Reverse current	I_R	$V_R=30V$	-	-	150	μA
Total capacitance	C_T	$V_R=10V, f=1MHz$	-	70	-	pF
Thermal resistance	R_{th}	Junction to ambient ²⁾	-	-	140	°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 $I_F - V_F$

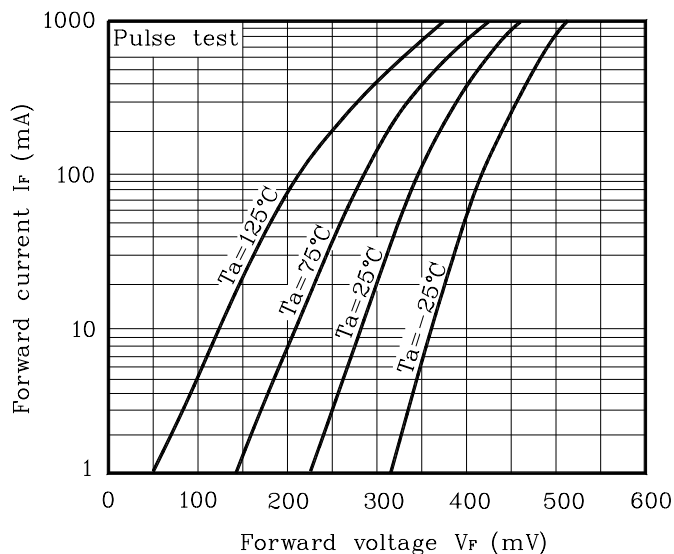


Fig. 2 $I_R - V_R$

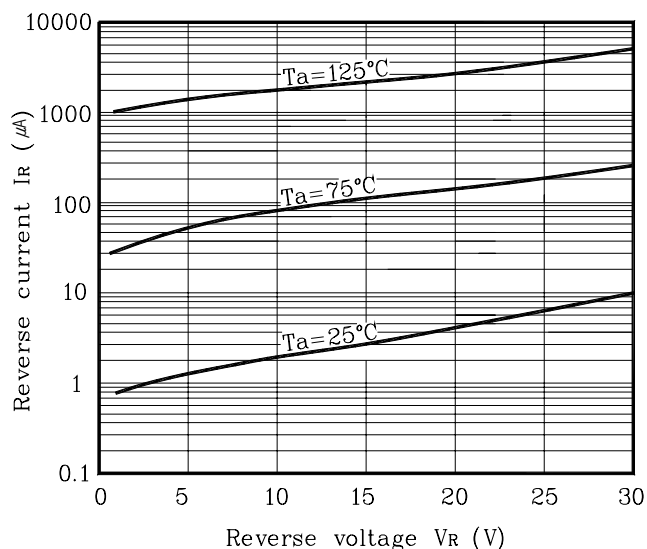
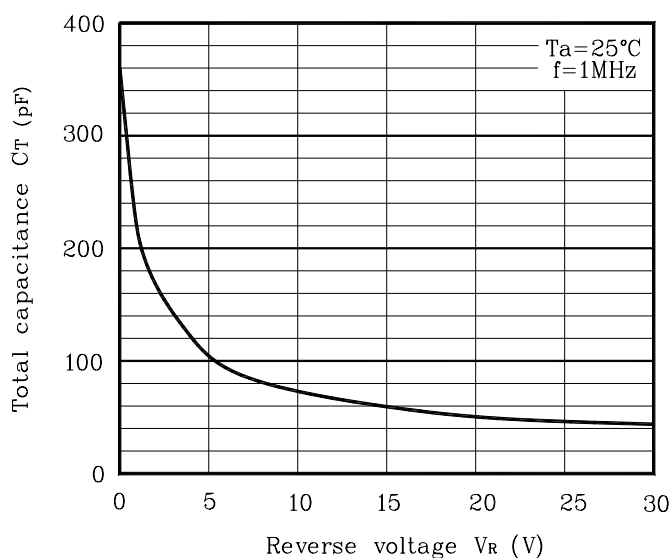


Fig. 3 $C_T - V_R$



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