

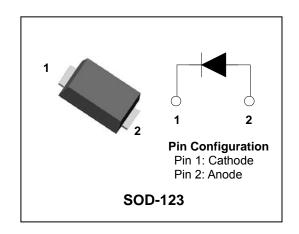
30V, 1A SCHOTTKY BARRIER RECTIFIER

Features

- Low forward voltage drop
- Low power loss and High efficiency
- · Low leakage current
- · High surge capability
- Full lead (Pb)-free and RoHS compliant device

Applications

- High efficiency SMPS
- · Output rectification
- · High frequency switching
- Freewheeling
- DC-DC converter systems



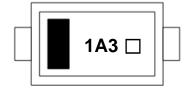
Description

The SDB130 is suited for Switch Mode Power Supply and high frequency DC to DC converters. This device is especially intended for use in low voltage, high frequency inverters, freewheeling and polarity protection applications.

Ordering Information

Device	Marking Code	Package	Packaging
SDB130	1A3□	SOD-123	Tape & Reel

Marking Information



1A3 = Specific Device Code

☐ = Year & Week Code Marking

= Color band denote cathode

KSD-D6B005-003

Absolute Maximum Ratings (Rating at 25℃ ambient temperature unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Maximum repetitive reverse voltage	V_{RM}	30	>
Maximum DC blocking voltage	V_R	30	٧
Average forward rectified current	I _F	1	А
Non-repetitive peak forward surge current (t=8.3ms)	I _{FSM}	8	Α
Operating junction temperature	TJ	150	00
Storage temperature range	T _{stg}	-55 ~ 150	°C

Electrical Characteristics (Rating at 25 ℃ ambient temperature unless otherwise specified.)

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Forward voltage	V _F 1)	I _F =1A	-	0.32	0.37	V
Reverse leakage current	I _R	V _R =30V	-	-	2	mA
Total capacitance	Ст	V _R =10V, f=1MH _Z	-	60	-	pF
Thermal resistance	R _{th(j-a)}	Junction to ambient 2)	-	-	140	°C/W

^{* 1):} Pulse test : t_P≤380us, Duty cycle≤2%

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^{* 2):} Device mounted on glass epoxy PCB (recommanderable minimum solder land)

Electrical Characteristic Curves

Fig. 1 I_F - V_F

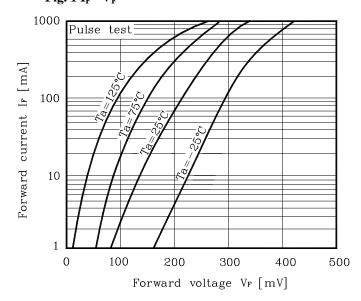


Fig. 2 I_{R} - $V_{R}\,$

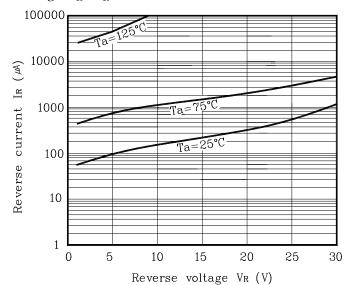
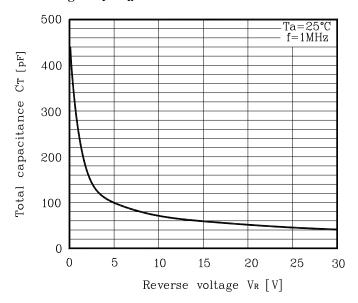
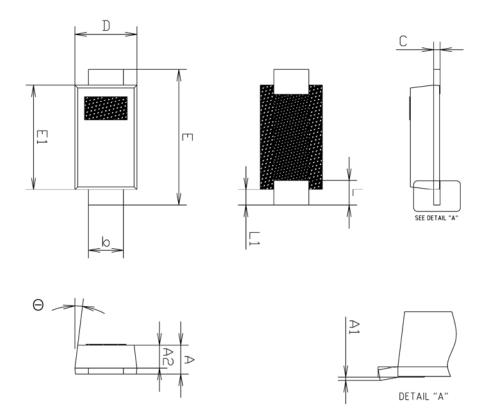


Fig. 3 C_T - V_R



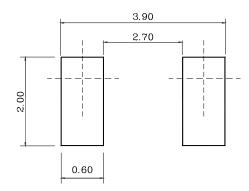
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Package Outline Dimension (Unit: mm)



	MILLIMETERS			NOTE
SYMBOL	MINIMUM	NOMINAL	MAXIMUM	NOTE
Α	0.70	0.750	0.80	
A1	0.00	_	0.10	
A2	0.55	0.60	0.65	
Ь	0.85	0.92	0.99	
С	0.12	0.17	0.22	
D	1.50	1.60	1.70	
E	3.30	3.50	3.70	
E1	2.60	2.70	2.80	
L	0.49	0.64	0.79	
L1	0.30	0.40	0.50	
Θ	4°	_	10°	

Recommend PCB Solder Land Dimension (Unit: mm)



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