Schottky Barrier Diode

General description

General Application Schottky barrier rectifier, encapsulated in a SOD523 leadless ultra small Surface-Mounted Device (SMD) plastic package.



SOD523

Features and benefits

- Average forward current: $I_{F(AV)} \leqslant$ 200 mA
- Reverse voltage: $V_R \leqslant$ 30 V
- Low forward voltage: $V_F \leqslant$ 500 mV @200mA
- Leadless ultra small SMD plastic package
- We declare that the material of product compliance with RoHS requirements and Halogen Free



Application information

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

Ordering information

Device	Package	Marking	Packaging
RB521S-30	SOD523	C	3000/Tape & Reel

Absolute Maximum Ratings at T_A = 25 ℃ (Single Diode)

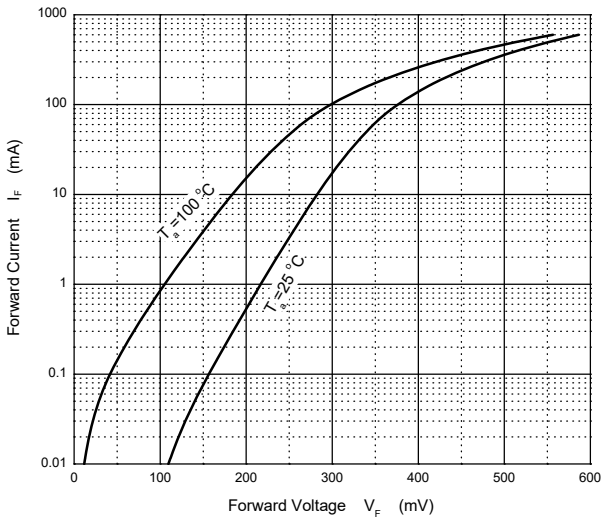
Parameter	Symbols	Value	Unit
Reverse Voltage	V_R	30	V
Mean rectifying current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current at t = 8.3 s	I_{FSM}	1	A
Power Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

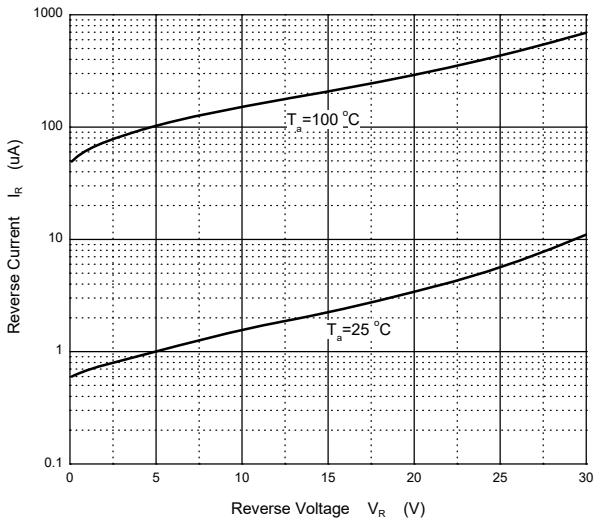
Characteristics at T_A = 25 ℃

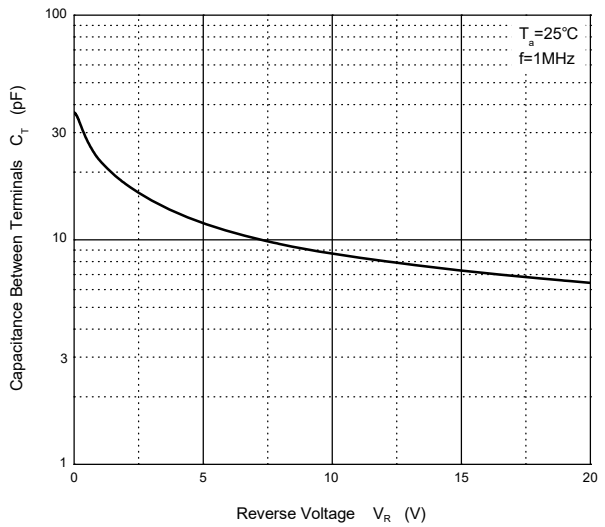
Parameter	Symbols	Min.	Typ.	Max.	Unit
Forward Voltage at I_F = 10 mA at I_F = 200 mA	V_F	 -- --	 -- --	 0.35 0.5	V
Reverse Current at V_R = 10 V	I_R	--	--	30	μA

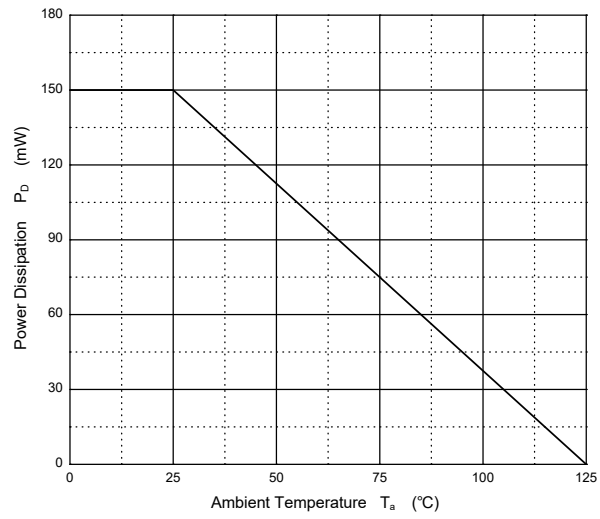
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Typical Characteristic Curves



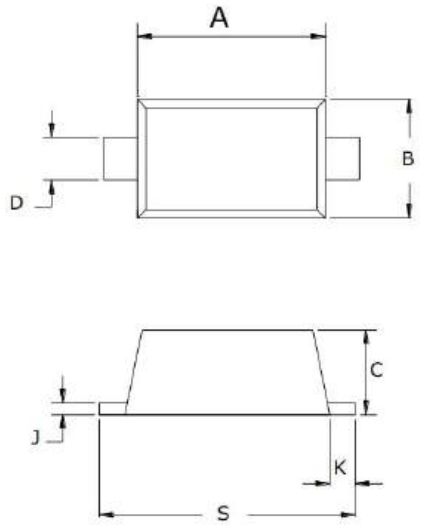






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Package Outline Dimensions SOD523



SYMBOL	Dimensions In Millimet	
	MIN	MAX
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
J	0.07	0.20
K	0.15	0.25
S	1.50	1.70

Suggested Pad Layout

