

**Surface Mount Schottky Barrier Diode****Forward Current - 200 mA**
Reverse Voltage - 30 V**Features**

- Low Forward Voltage
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Type

Mechanical Data

- Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0

- Polarity: Color band denotes cathode end

- Mounting Position : Any

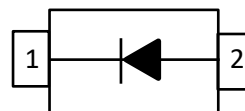
Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Ordering Information

- Package :SOD523
- Reel Size :7 (inches)
- Quantity Per Reel :3,000 pcs
- Quantity One Box :45,000 pcs
- Quantity One Carton :180,000 pcs

Package Outline

SOD523 Top View

Device Schematic & PIN Configuration**Product Type Marking Code****Maximum Ratings** (@TA = +25°C, unless otherwise specified.)**Absolute Ratings**

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RM}	30	V
Mean Rectifying Current	I_O	200	mA
Non-repetitive Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	1	A
Power Dissipation	P_d	150	mW
Junction temperature	T_j	125	° C
Storage Temperature Range	T_{STG}	-55 to +150	° C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	° C/W

Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Current	$V_R=10V$	I_R	-	-	1	uA
Forward Voltage	$I_F=200mA$	V_F	-	-	0.6	V

RB520S-30-7-99-01-BC1589

Rev-0, 29-Sep-2022



Rating and Characteristic Curves

FIG.1 - Forward Characteristics

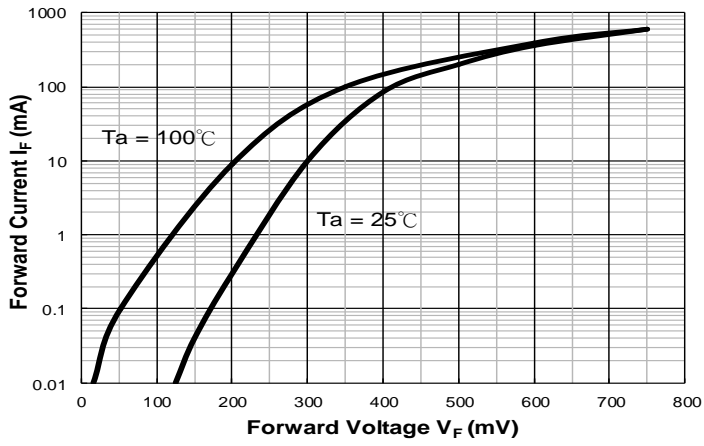


FIG.2 - Reverse Characteristics

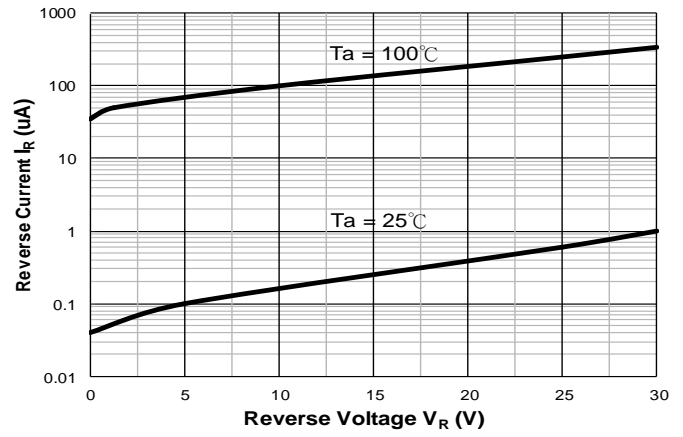


FIG.3 - Power Derating Curve

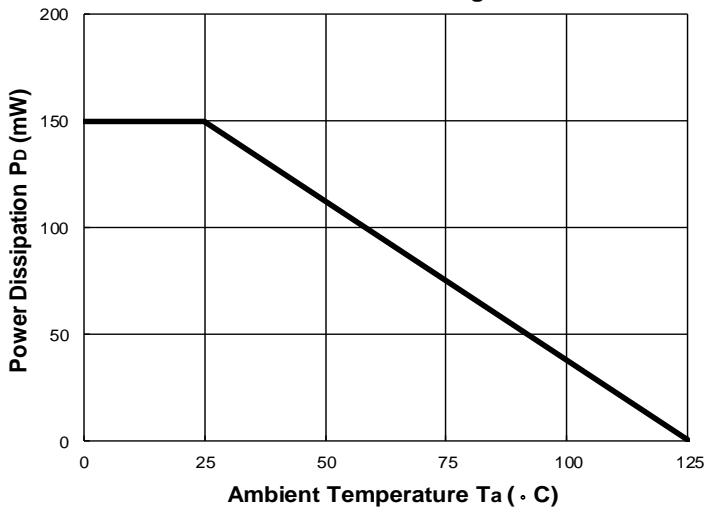
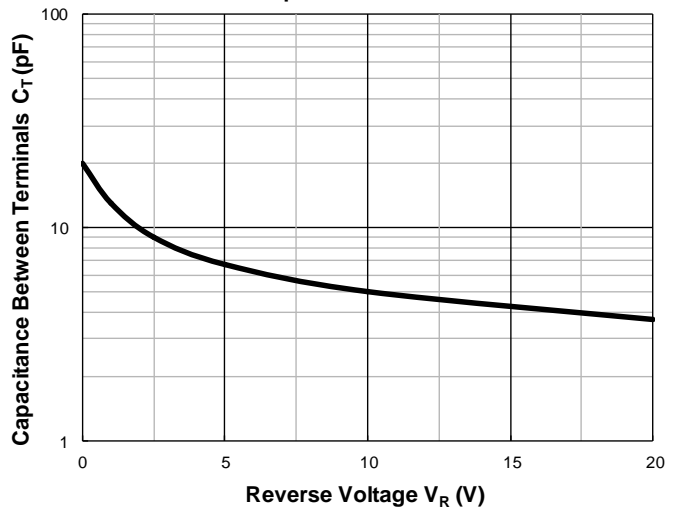
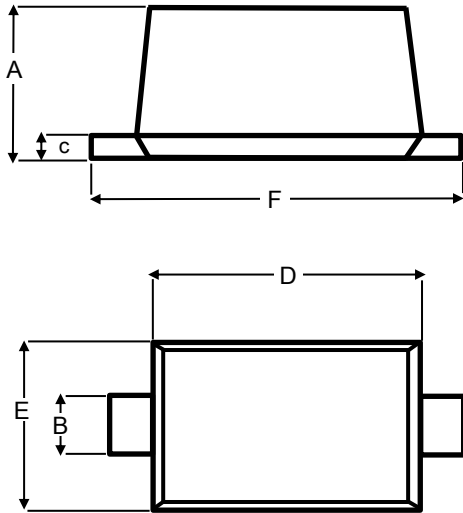


FIG.4 - Capacitance Characteristics





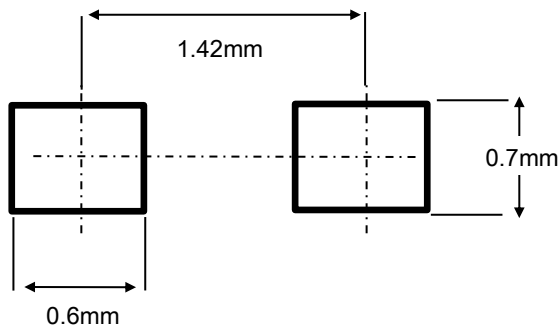
Package Outline Dimensions



SOD523 Package		
Dim	Min	Max
A	0.53	0.73
B	0.28	0.38
c	0.08	0.15
D	1.10	1.30
E	0.75	0.85
F	1.50	1.70
All Dimensions in mm		

Products with logo

Suggested Soldering Pad Layout



Note:

- 1. The pad layout is for reference purposes only.
- 2. General tolerance $\pm 0.05\text{mm}$



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