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Product data sheet

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SOD-523

**RB520S-40** Schottky Barrier Diode



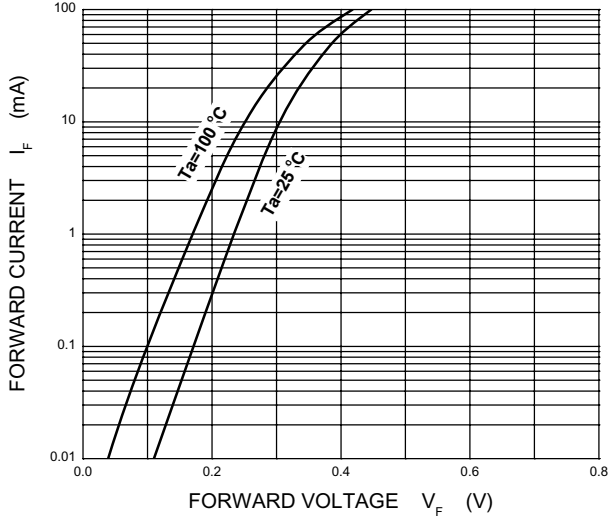
**FEATURES**

- Small surface mounting type
- Low  $I_R$
- High reliability

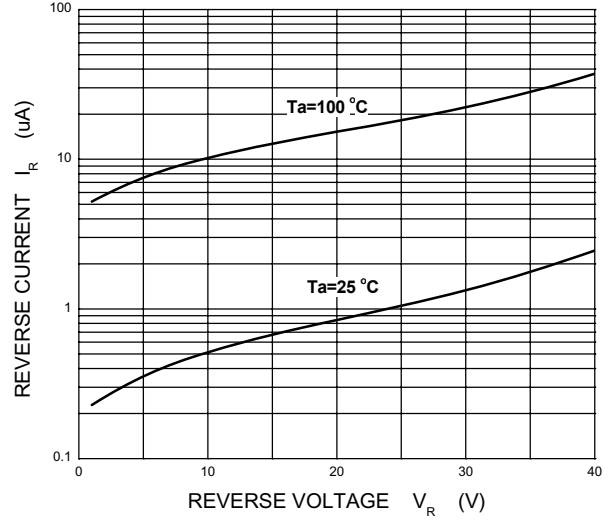
**Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$**

Parameter	Symbol	Limit	Unit
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	0.2	A
Non-repetitive peak forward surge current@ $t=8.3\text{ms}$	$I_{FSM}$	1	A
Power Dissipation	$P_D$	150	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	667	$^\circ\text{C}/\text{W}$
Junction temperature	$T_J$	125	$^\circ\text{C}$
Storage temperature	$T_{STG}$	-55~+150	

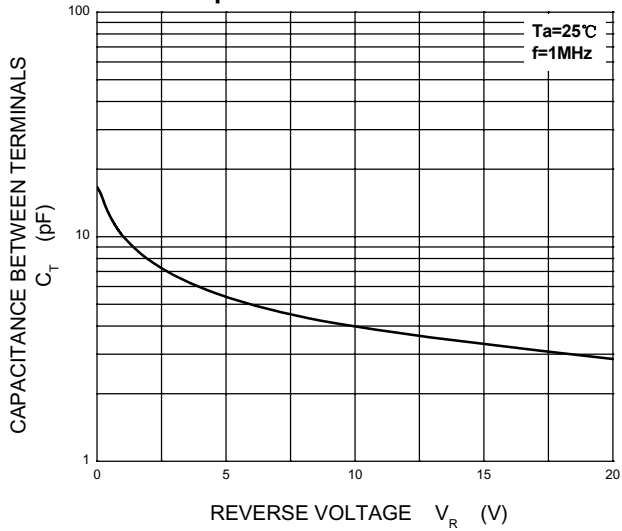
**Forward Characteristics**



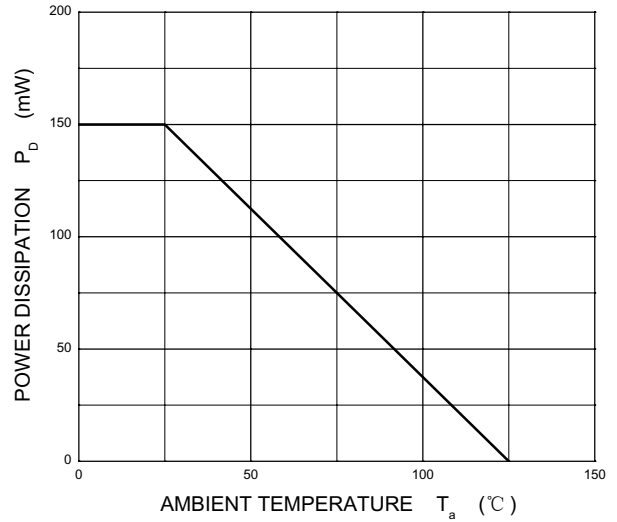
**Reverse Characteristics**



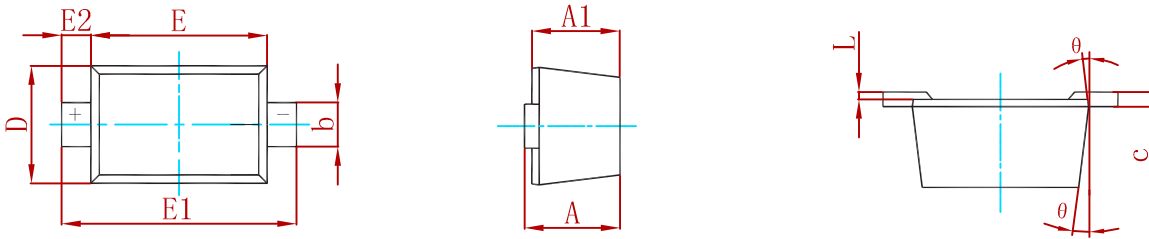
**Capacitance Characteristics**



**Power Derating Curve**

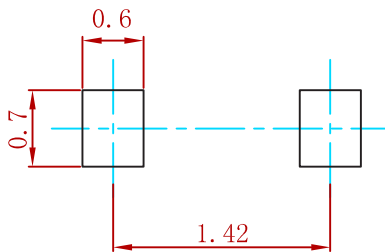


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

**Suggested Pad Layout**



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
RB520S-40	SOD-523	3000

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