

SOD-523 Plastic-Encapsulate Diodes



SOD-523

• Features

- Small surface mounting type
- Low I_R
- High reliability

• MAXIMUM RATINGS $(T_C=25^{\circ}\text{C})$

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	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	$-40\sim+125$	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	$-55\sim+150$	$^{\circ}\text{C}$

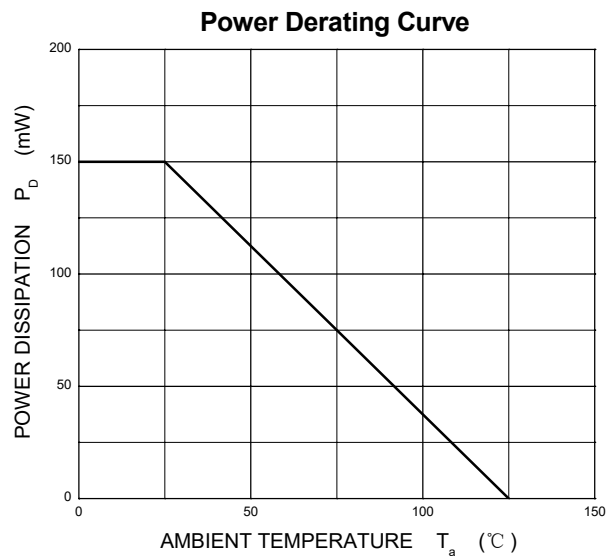
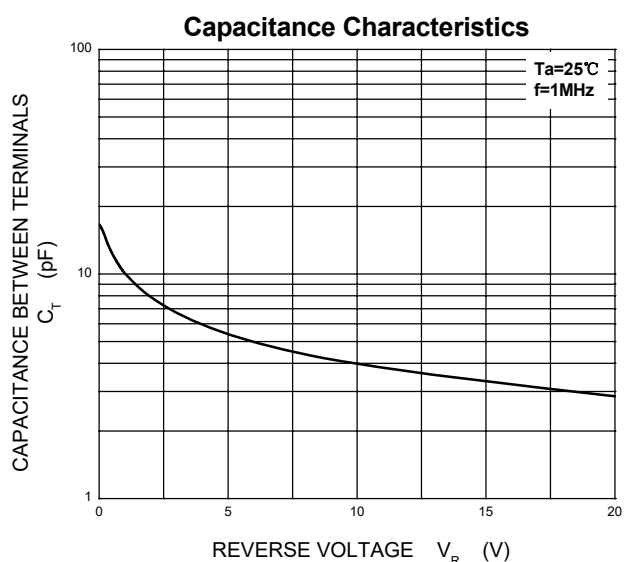
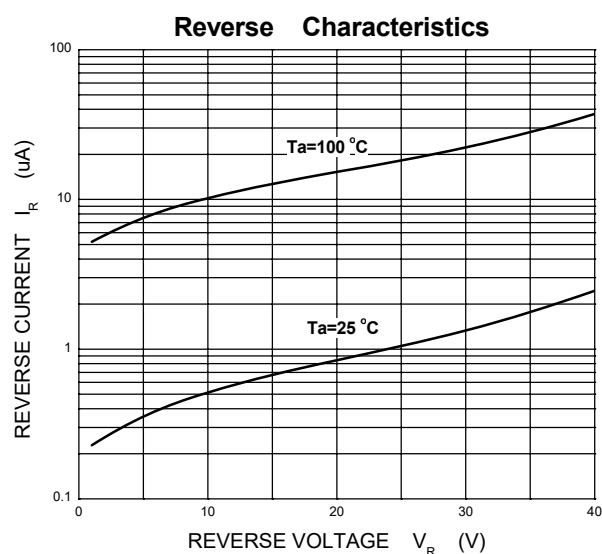
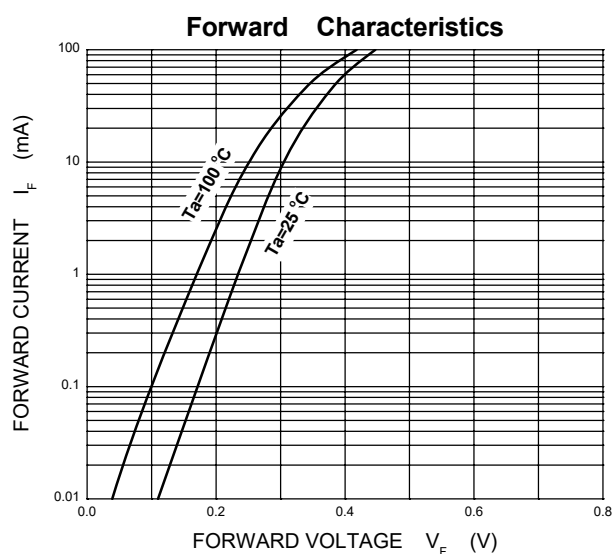
• ELECTRICAL CHARACTERISTICS $(T_a=25^{\circ}\text{C})$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F=10\text{mA}$		0.304	0.39	V
		$I_F=100\text{mA}$		0.446	0.55	V
Reverse current	I_R	$V_R=10\text{V}$		0.605	1	μA
		$V_R=40\text{V}$		2.837	10	μA

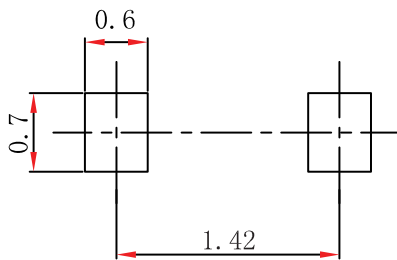
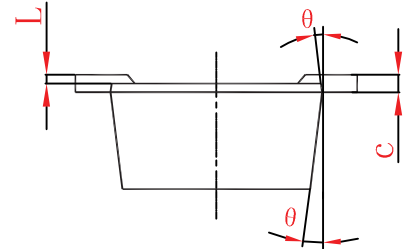
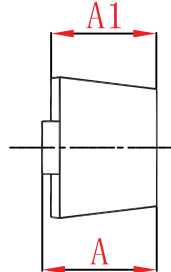
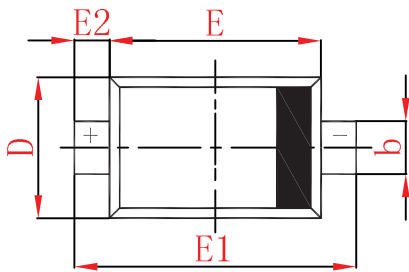
• Ordering Information:

Part NO.	RB520S-40
Marking	D1
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

• Typical Characteristics



SOD-523 Package Outline Dimensions



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Sym ol	imensions In Millimeters		imensions 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	