

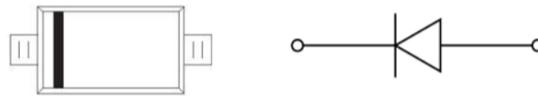
**Features**

- Low Forward Voltage Drop
- Very Small SMD Package

**Applications**

- Low current rectification

**Dimensions and Pin Configuration**



**Marking:**



**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)**

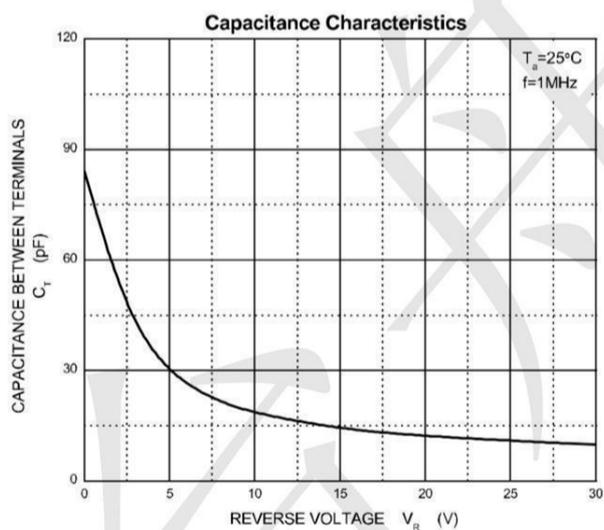
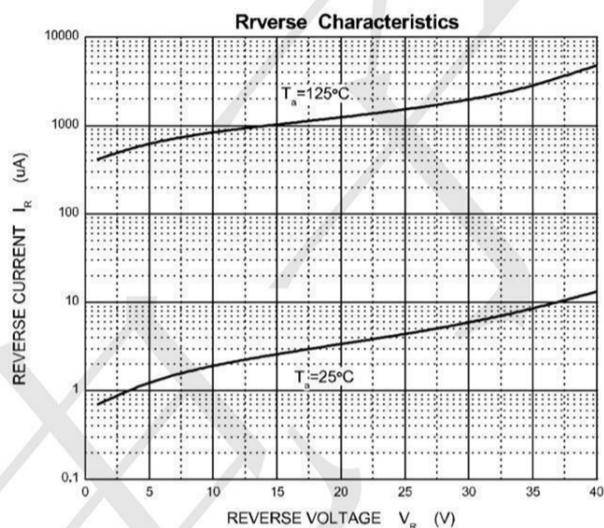
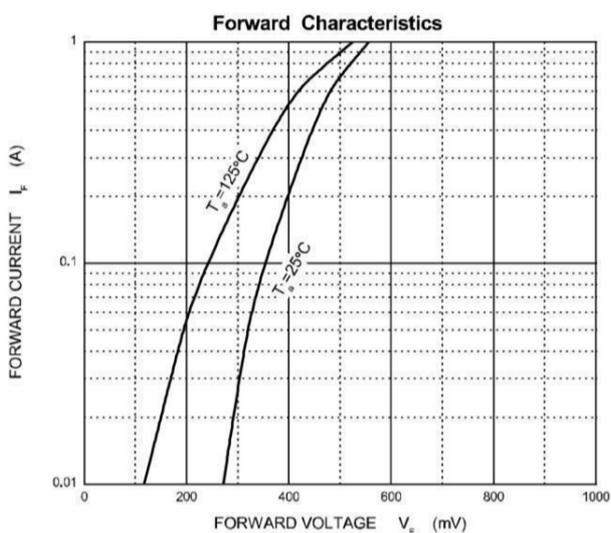
Parameter	Symbol	Value	Unit
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_O$	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	7	A
Power Dissipation	$P_D$	0.5	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	-40 ~ +125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)**

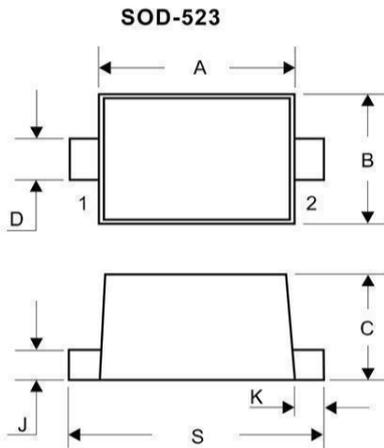
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	$V_{BR}$	$I_R = 1\text{mA}$	40			V
Reverse current	$I_R$	$V_R = 40\text{V}$		10	40	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 0.1\text{A}$		0.35	0.38	V
		$I_F = 0.2\text{A}$		0.37	0.40	V
		$I_F = 0.5\text{A}$		0.42	0.49	V
		$I_F = 0.7\text{A}$		0.47	0.55	V
		$I_F = 1\text{A}$		0.51	0.61	V
Total capacitance	$C_{tot}$	$V_R = 10\text{V}, f = 1\text{MHz}$		19		pF



### Typical Characteristics



**Outline Drawing - SOD-523 (0603)**



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	0.50	0.70	0.020	0.028
D	0.25	0.35	0.010	0.014
J	0.07	0.20	0.0028	0.0079
K	0.15	0.25	0.006	0.010
S	1.50	1.70	0.059	0.067

**Land Pattern - SOD-523 (0603)**

**Recommended Mounting Pad Layout**

