

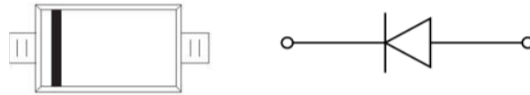
Features

- Low Forward Voltage Drop
- Very Small SMD Package

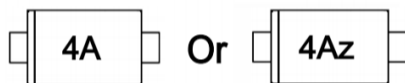
Applications

- 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	$^\circ\text{C/W}$
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	μA
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



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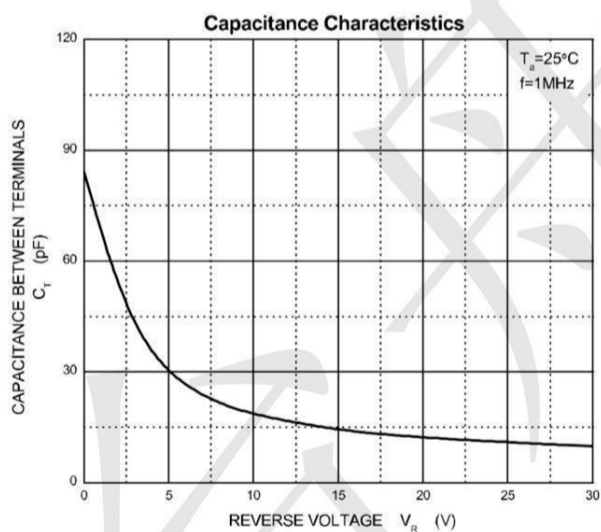
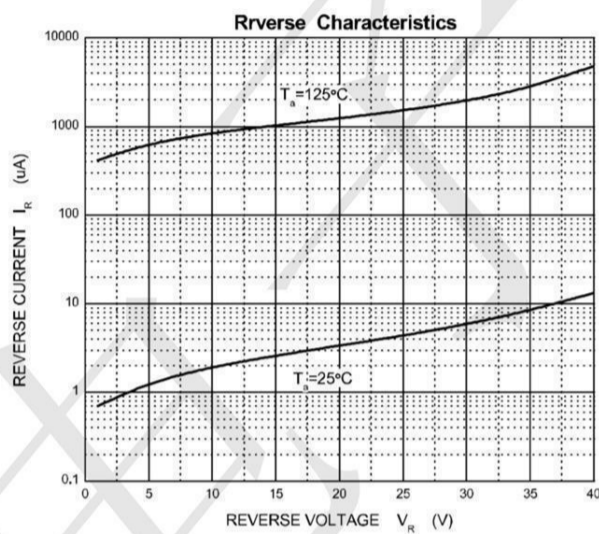
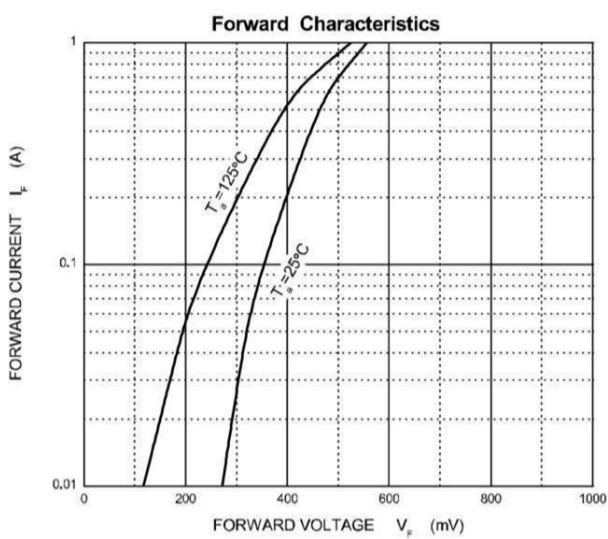
—台丹电子—

TPNSR0520V2T1G

Schottky barrier diode

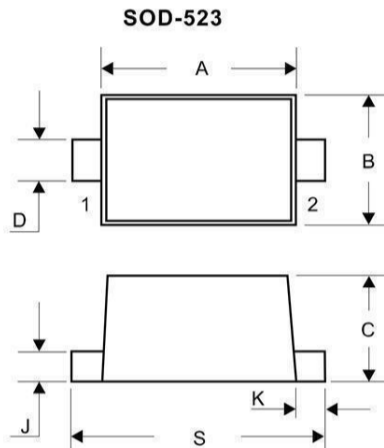
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Typical Characteristics



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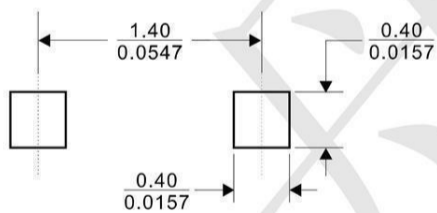
Outline Drawing - SOD-523 (0603)



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



Dimensions in (millimeters)
inches