TECH PUBLIC
台舟电子

B1040X

Schottky barrier diode

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Features

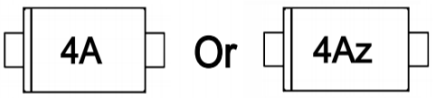
- Low Forward Voltage Drop
- Very Small SMD Package

Applications

- Low current rectification

Dimensions and Pin Configuration

Marking:



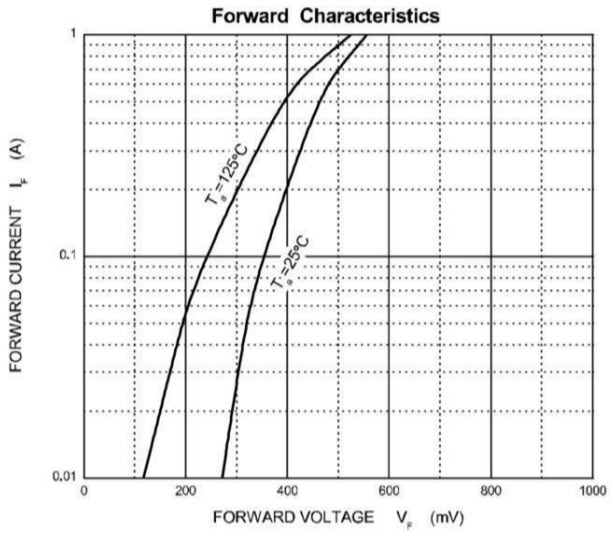
ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

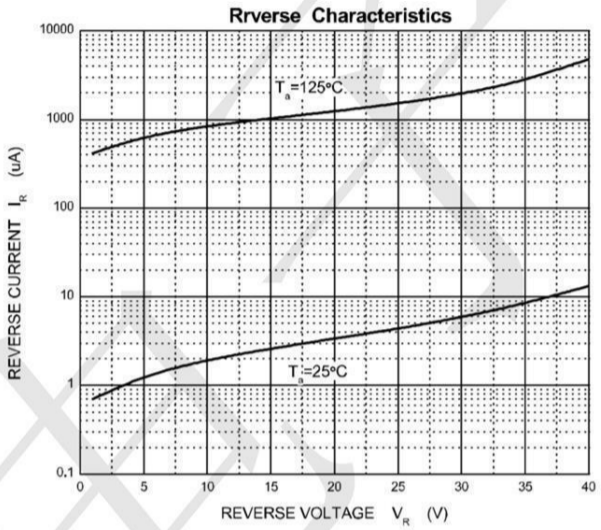
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	7	A
Power Dissipation	P_D	0.5	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	℃/W
Operating Junction Temperature Range	T_J	-40 ~ +125	℃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

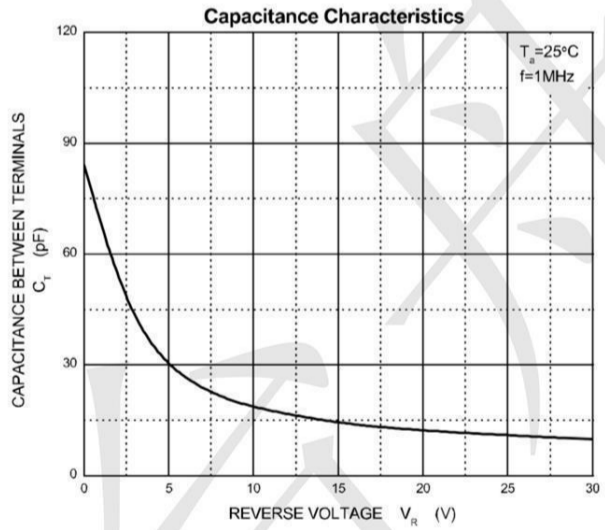
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

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

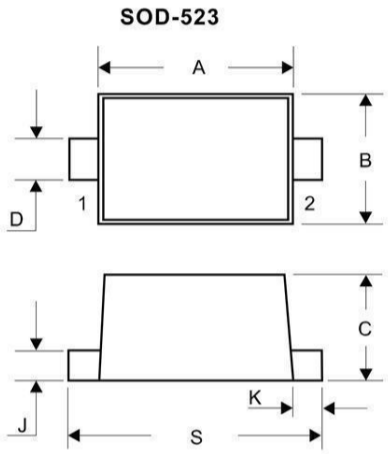
Typical Characteristics







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)