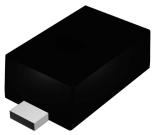
GOOD-ARK SEMICONDUCTOR

GSD103AX

Schottky Diode
Reverse Voltage 40V Forward Current 350mA

Features

- Low forward voltage drop
- Matte tin (Sn) lead finish
- Cathode band/device marking
- Surface mount package ideally suited for automatic insertion



SOD-523

Schematic Diagram

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	I_{FM}	350	mA
Non-Repetitive Peak Forward Surge Current (@ t=8.3ms)	I_{FSM}	2.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	I_F=100uA	40	-	-	V
Forward Voltage	V_F	I_F=20mA	-	-	0.37	V
		I_F=200mA	-	-	0.60	V
Reverse Current	I_R	V_R=30V	-	-	5	μA
Capacitance	C_T	V_R=0V, f=1MHz	-	-	50	pF
Typical Reverse Recovery Time	t_{rr}	I_F=I_R=200mA, I_{rr}=0.1 x I_R, R_L=100Ω	-	10	-	ns

Typical Characteristic Curves

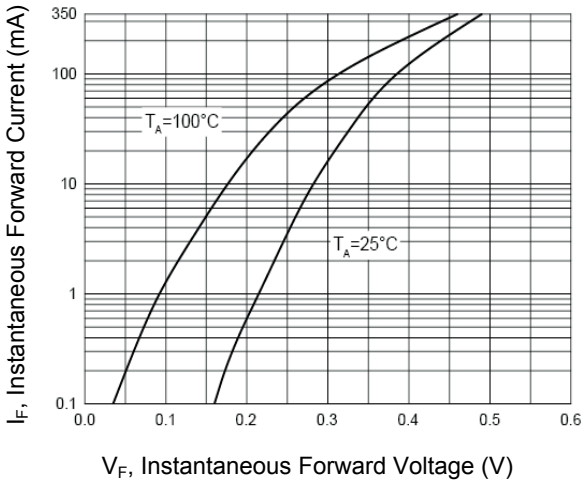


Figure 1. Typical Instantaneous Forward Characteristics

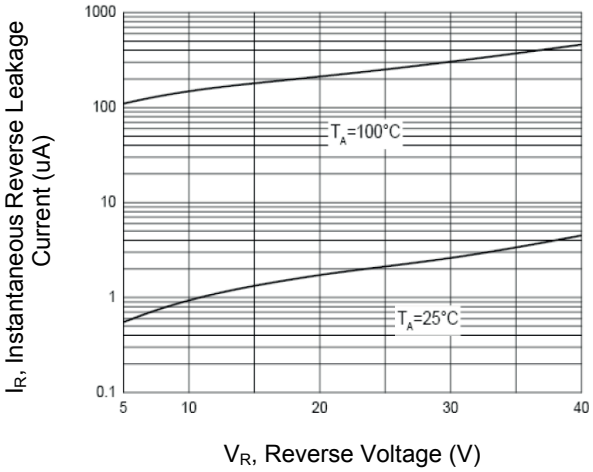


Figure 2. Typical Reverse Leakage Characteristics

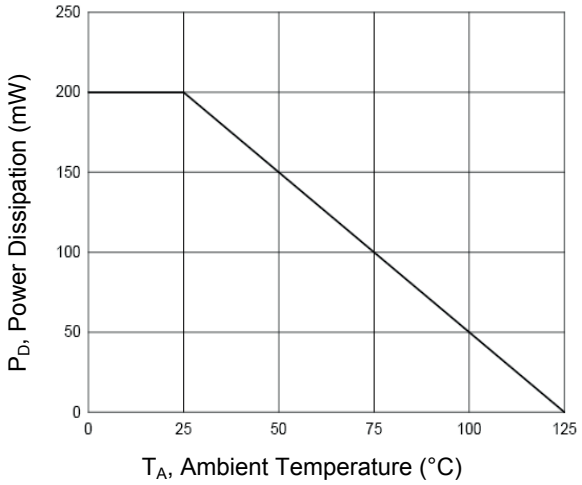


Figure 3. Power Derating Curve

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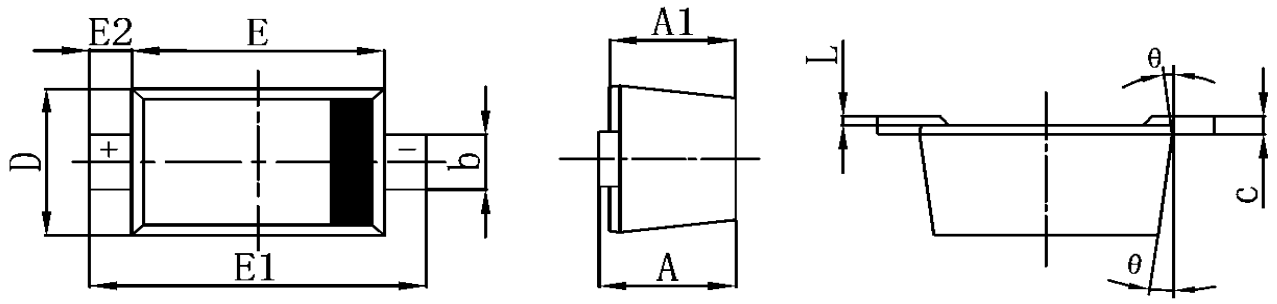
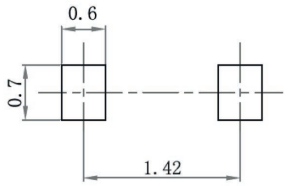
Package Outline Dimensions (SOD-523)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.700	0.020	0.028
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	0.150	0.250	0.006	0.010
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

Recommended Pad Layout



Note:

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

Order Information

Device	Package	Marking	Packaging	SPQ
GSD103AX	SOD-523	S4	Tape & Reel	8,000 pcs / Reel