



SOD523

**FEATURES**

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automated Insertion
- Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

PINNING

PIN DESCRIPTION

- 1 Cathode
- 2 Anode



Top View
Simplified outline SOD-523 and symbol

Parameter		Symbols	SD103AWT	Units
Peak Repetitive Reverse Voltage		V_{RRM}	40	V
Working Peak Reverse Voltage		V_{RWM}		
DC Blocking Voltage		V_R		
RMS Reverse Voltage		$V_{R(RMS)}$	28	V
Forward Continuous Current		I_F	200	mA
Non-Repetitive Peak Forward Surge Current @t = 8.3ms		I_{FSM}	0.5	A
Power dissipation		P_D	200	mW
Reverse Breakdown Voltage	$I_R = 100\mu A$	V_{BR}	40(Min)	V
Forward Voltage	$I_F = 1.0\text{ mA}$ $I_F = 5.0\text{ mA}$ $I_F = 20\text{ mA}$ $I_F = 200\text{ mA}$	V_F	0.27(Typ) 0.32(Typ) 0.37(Max) 0.60(Max)	V
Peak Reverse Current	$V_R = 30\text{ V}$	I_R	5.0(Max)	μA
Typical Junction Capacitance	$V_R = 4\text{ V}, f = 1\text{ MHz}$	C_T	50	pF
Junction Temperature		T_j	125	°C
Storage Temperature		T_{stg}	-55 ~ +150	°C

Fig.1 Power Derating Curve

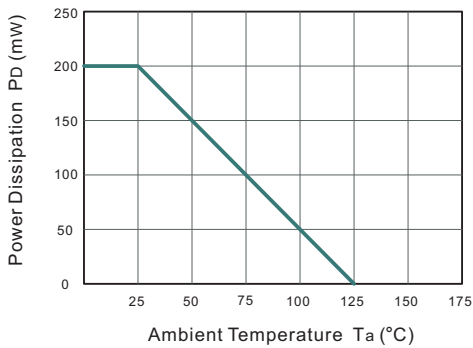


Fig.2 Typical Instantaneous Reverse Characteristics

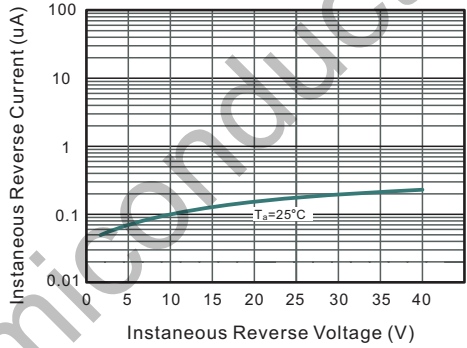


Fig.3 Typical Forward Characteristic

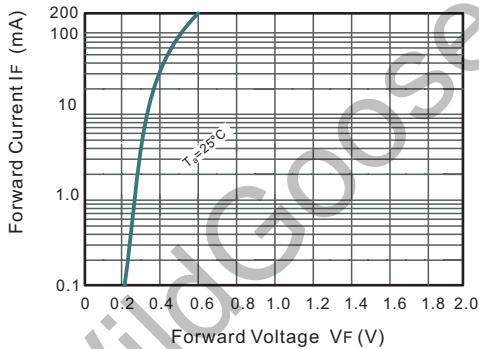
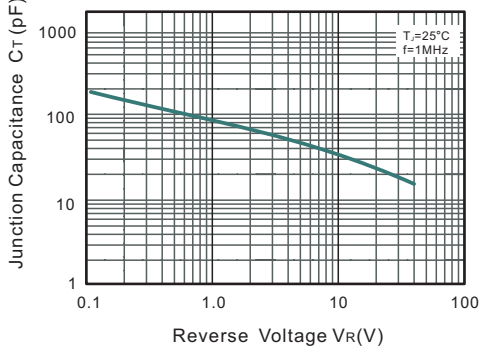


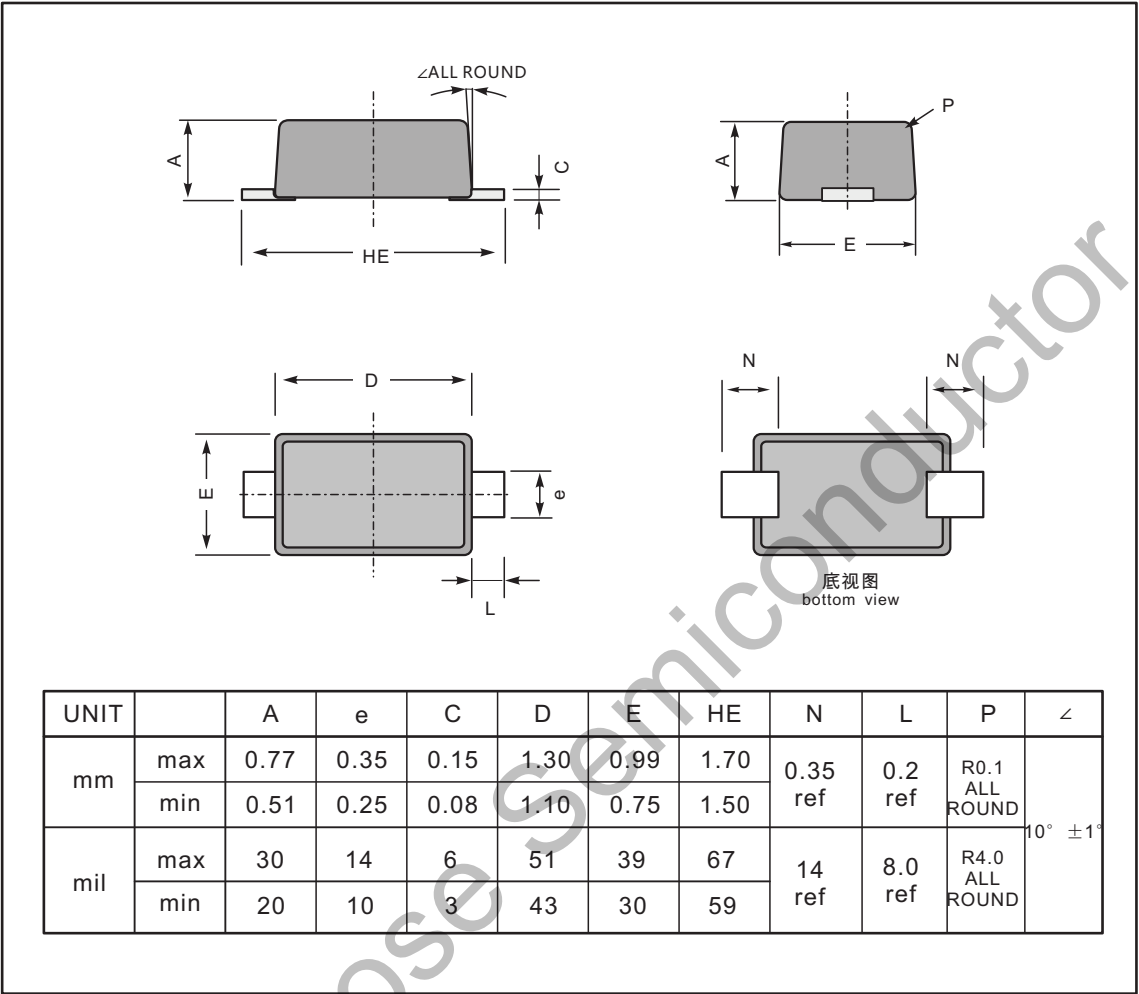
Fig.4 Typical Junction Capacitance



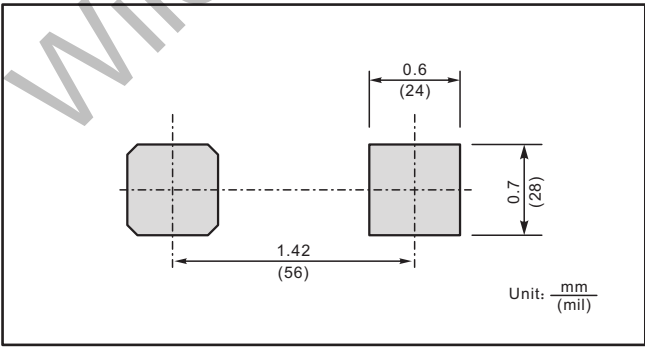
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



The recommended mounting pad size



Marking

Type number	Marking code
SD103AWT	S4