

SOD-523 Flat Lead



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.

Parameter		Symbols	SD103AWT	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V_{RRM} V_{RWM} V_R	40	V
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

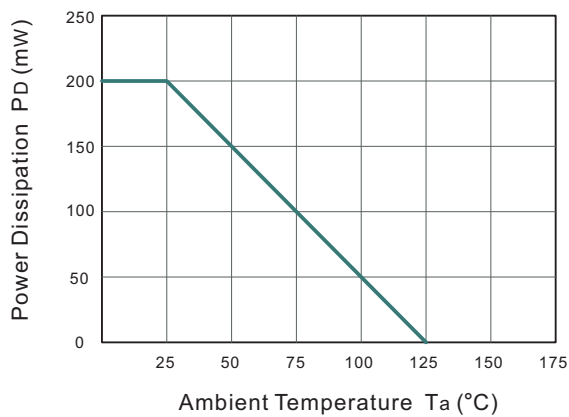


Fig.2 Typical Instaneous Reverse Characteristics

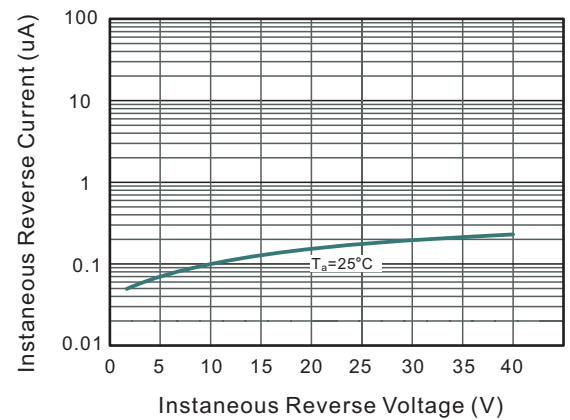


Fig.3 Typical Forward Characteristic

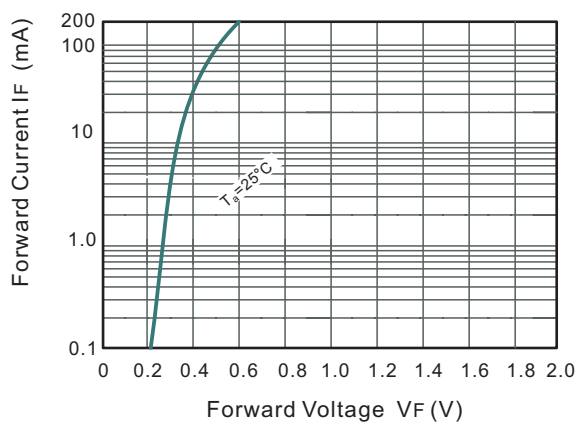
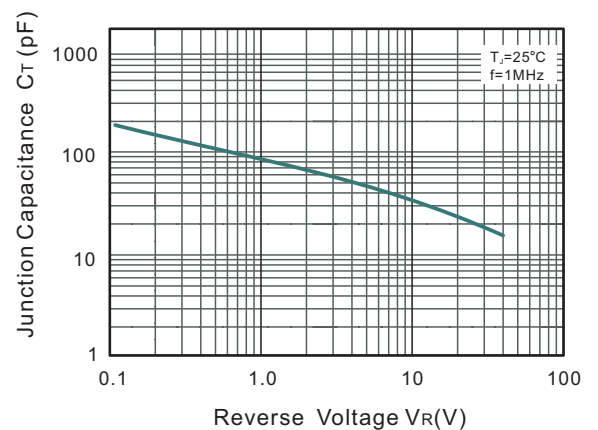


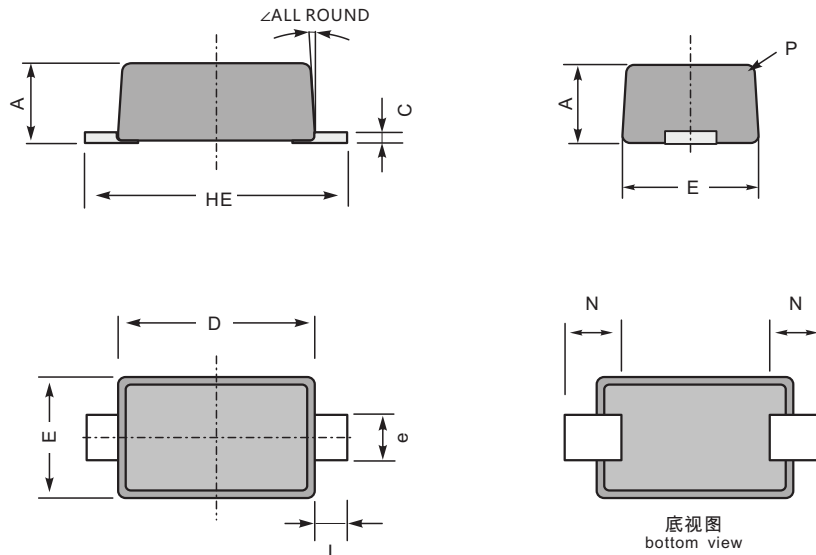
Fig.4 Typical Junction Capacitance



PACKAGE OUTLINE

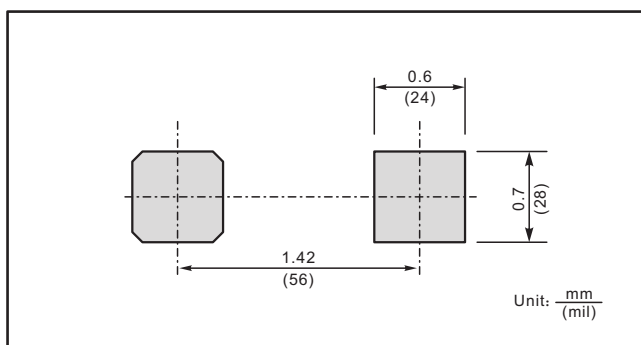
Plastic surface mounted package; 2 leads

SOD-523



UNIT		A	e	C	D	E	HE	N	L	P	∠
mm	max	0.77	0.35	0.15	1.30	0.99	1.70	0.35	0.2	R0.1	10° ± 1°
	min	0.51	0.25	0.08	1.10	0.75	1.50	ref	ref	ALL ROUND	
mil	max	30	14	6	51	39	67	14	8.0	R4.0	
	min	20	10	3	43	30	59	ref	ref	ALL ROUND	

The recommended mounting pad size



Marking

Type number	Marking code
SD103AWT	S4