

Features

Peak Reverse Working Voltage: 5V
Low leakage current
High ESD protection Level: >+/-15KV per HBM
IEC61000-4-2 Level 4 ESD Protection
IEC61000-4-4 Level 4 EFT Protection

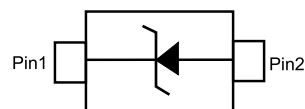


Applications

Cell phone handsets and accessories
Personal Digital Assistants (PDAs)
Notebooks, Desktops, and Servers
Portable Instrumentation
Digital Cameras
MP3/MP4/PMP Players



SOD523



SOD-523

Schematic & PIN Configuration

Absolute Maximum Rating

Parameter	Symbol	Value	Units
Maximum peak pulse current ($t_p=8/20\mu s$)	I_{PP}	9	A
ESD Per IEC61000-4-2(Air)	V_{PP}	± 15	kV
ESD Per IEC61000-4-2(Contact)		± 10	kV
Maximum lead temperature for soldering during 10s	T_L	260	°C
Storage temperature range	T_{STG}	-55 to 150	°C
Junction Temperature range	T_{OP}	-55 to 150	°C

Electrical Characteristics

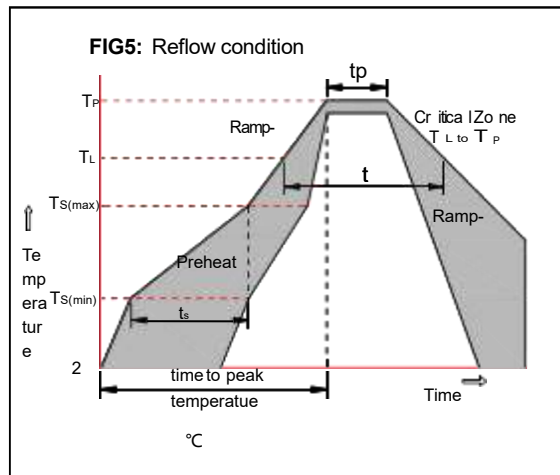
P/N	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 2)	I_T	C (pF)		V_C (V) @ $I_{PP}=1A$	V_C
	Max	Max	Min	mA	Typ	Max	Max	Per IEC61000-4-2
PESD5V0X1UB	5	1	6.2	1	0.5	0.9	8	10

Notes:

V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

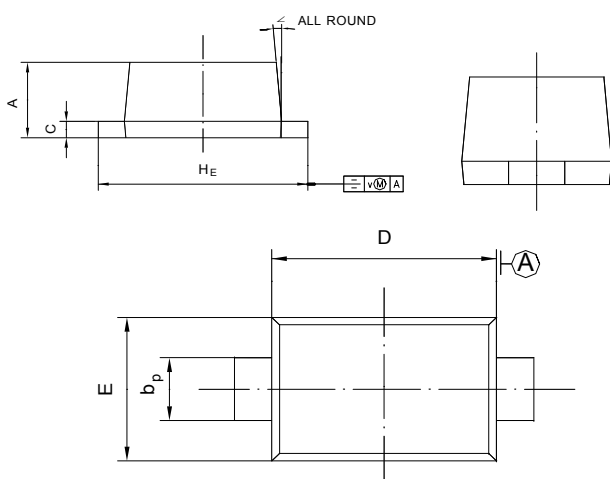
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

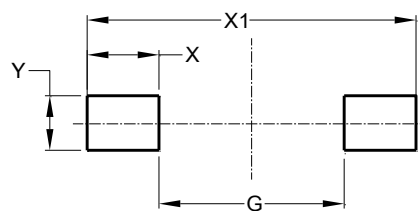


Package Dimensions & Suggested Pad Layout

SOD523



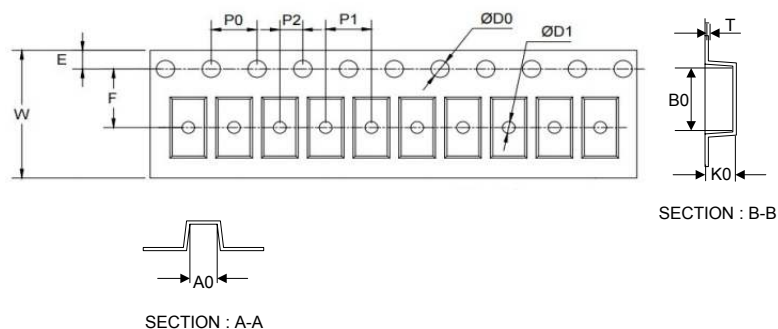
UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°



Dimensions	Value (in mm)
G	0.85
X	0.70
X1	2.25
Y	0.80

Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	2.00±0.20
P2	2.00±0.20
D0	1.55±0.20
D1	0.50±0.20
E	1.55±0.25
F	3.60±0.20
W	8.00±0.20
A0	1.30±0.20
B0	2.35±0.20
K0	0.95±0.20
T	0.20±0.20
D2	177.0±5.0
D3	55Min.
D4	R24.6±2.0
G	R82.0±2.0
I	13.0±2.0
W1	10.20±3.0
Quantity: 3000PCS	

7" Reel

