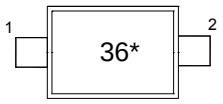
Transient Voltage Suppressors for ESD Protection

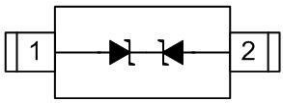
Features

◇ 2-pin lead-less package
◇ Junction capacitance (Max value: 16pF)
◇ Peak Pulse Current in 8/20μs Max value: 2A
◇ IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
◇ Low clamping voltage
◇ Low leakage current
◇ Working voltages:36V
RoHS Compliant

SOD-523



PIN Diagram



Applications

◇ Cellular Handsets and Accessories
◇ Personal Digital Assistants
◇ Notebooks and Handhelds
◇ Portable Instrumentation,Digital Cameras
◇ Peripherals, Audio Players, Industrial Equipment

Ordering information

Device	Package	Reel Size	Qty / Reel
ESD5Z36CA	SOD-523	7 inch	3000

Maximum Ratings (Ta = 25℃)

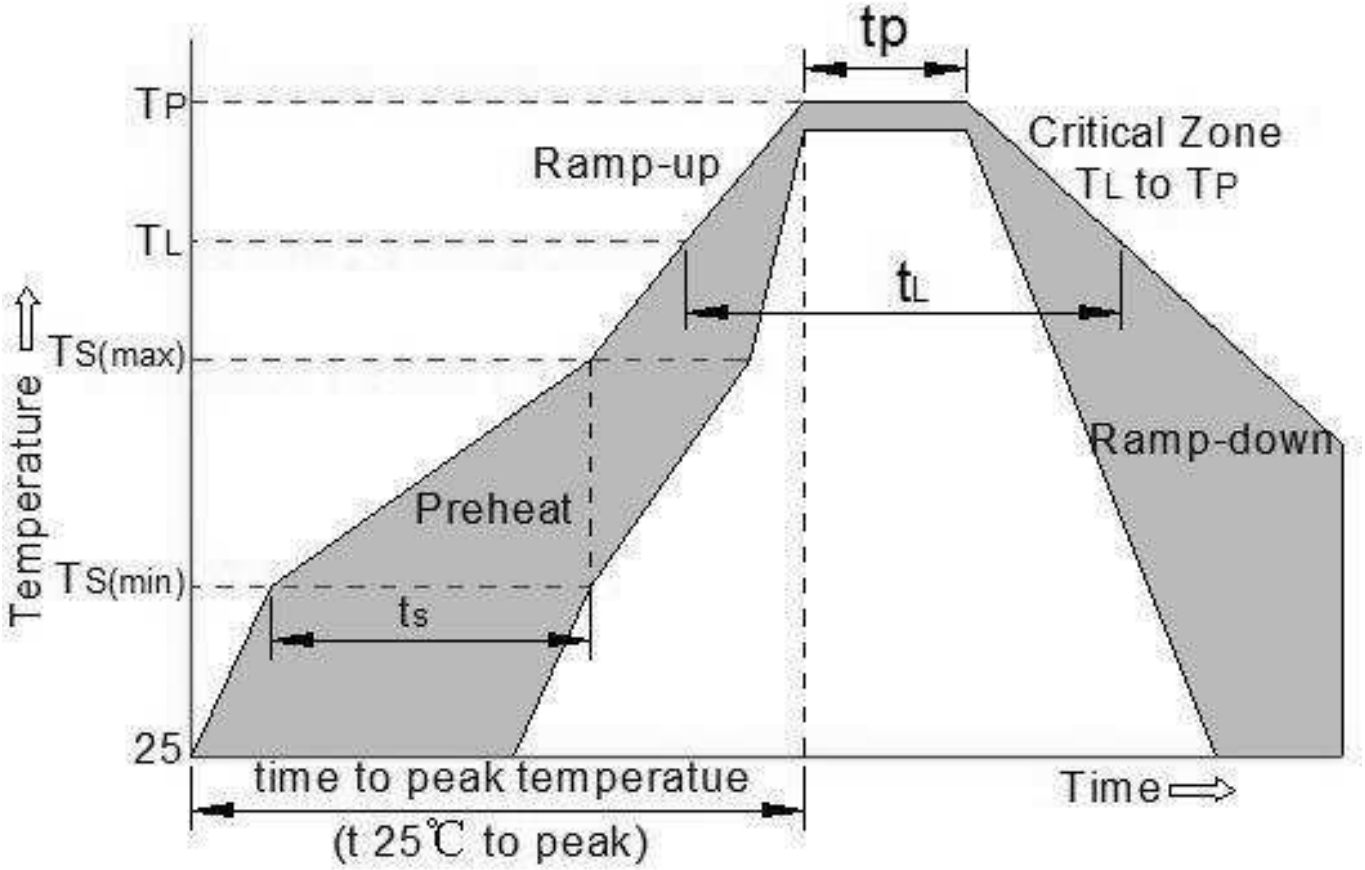
Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P_{PP}	195	W
Peak Pulse Current (8/20μs)	I_{PP}	2	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	±15 ±8	KV
Operating Temperature Range	T_J	-40 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (Ta = 25℃)

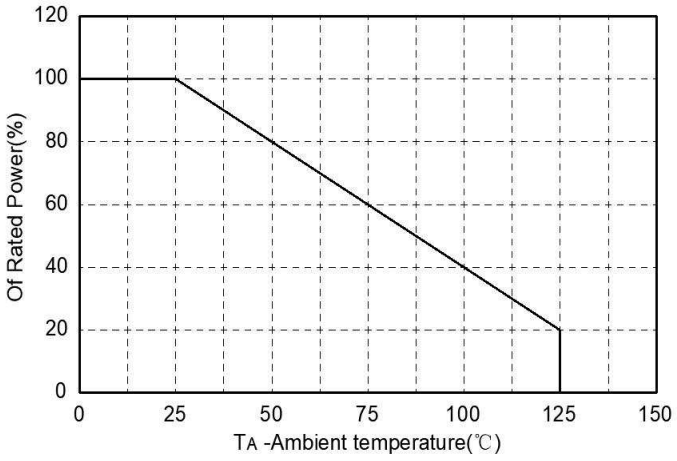
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				36	V
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R = 1mA	40		50	V
Reverse Leakage Current	I_R	V_R = 36V			1	uA
Clamping voltage	V_C	I_{PP} = 1A,T_P=8/20us			90	V
Clamping voltage	V_C	I_{PP} = 2A,T_P=8/20us			98	V
Junction capacitance	C_T	V_R =0V,f =1MH			16	pF

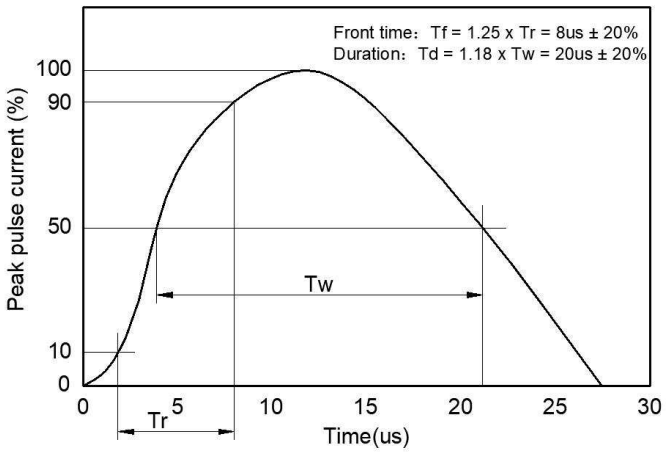
Soldering parameters

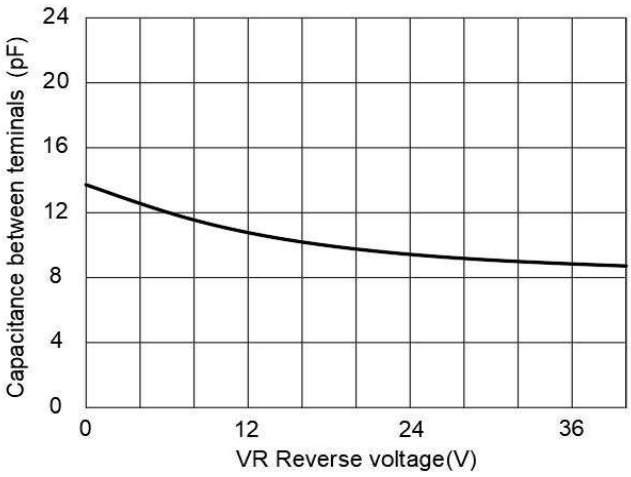
Reflow Condition		Pb-Free assembly see as bellow
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)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

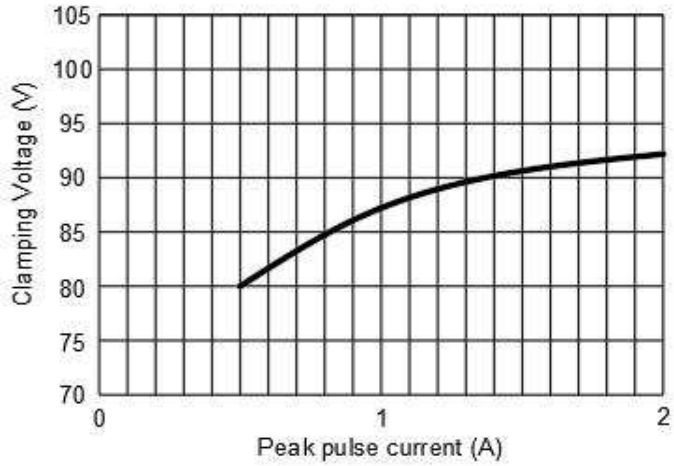


TYPICAL CHARACTERISTICS

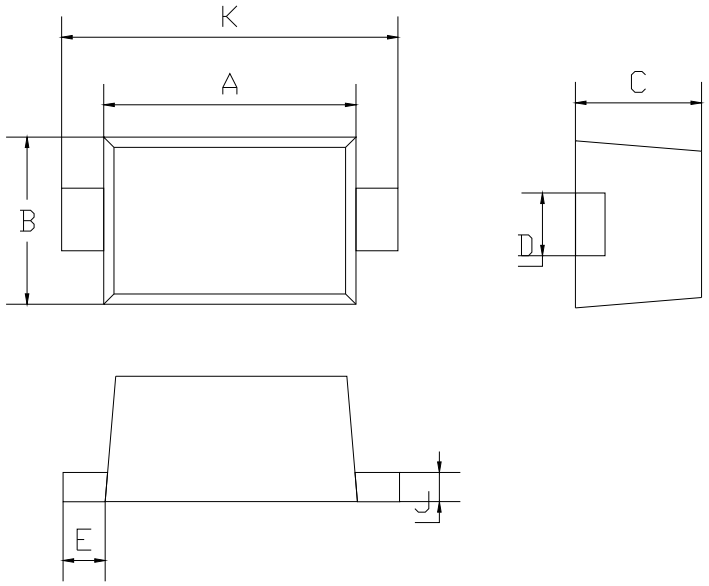






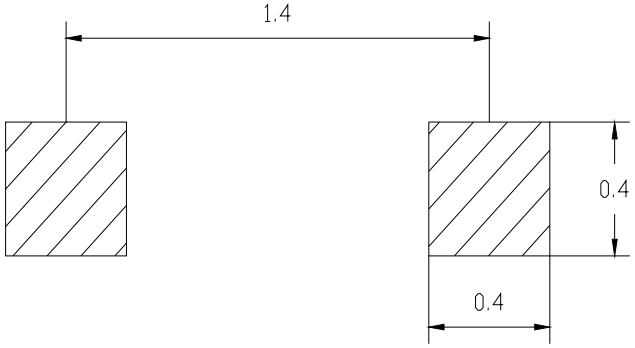


Plastic surface mounted package SOD-523



SOD-523		
Dim	Min	Max
A	1.1	1..3
B	0.7	0.9
C	0.5	0.7
D	0.3 Typical	
E	0.15	0.25
J	0.1 Typical	
K	1.5	1.7
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm