

100W Surface Mount TVS For ESD Protection**FEATURES**

- 100 Watts Peak Pulse Power per Line($t_p=8/20\mu s$)
- Protects one I/O or power line
- Low Clamping Voltage
- Ultra Low Capacitance:0.5pF
- Working Voltage:5V
- Low Leakage Current
- Response Time is Typically<1ns

MECHANICAL DATA

- Case : Molded, plastic DFN1006-2L
- Polarity : Shown follows
- Epoxy : UL94-V0 rated flame retardant

SOD-523 PACKAGE**Marking Codes**

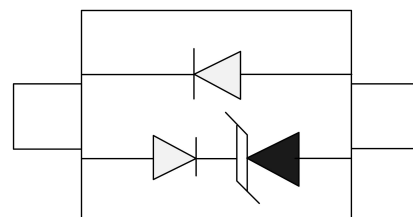
Pin Style: 1.Cathode 2.Anode

APPLICATIONS

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 players

IEC COMPATIBILITY

- EC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
- IEC61000-4-4(EFT)40A(5/50ns)

SCHEMATIC & PIN CONFIGURATION

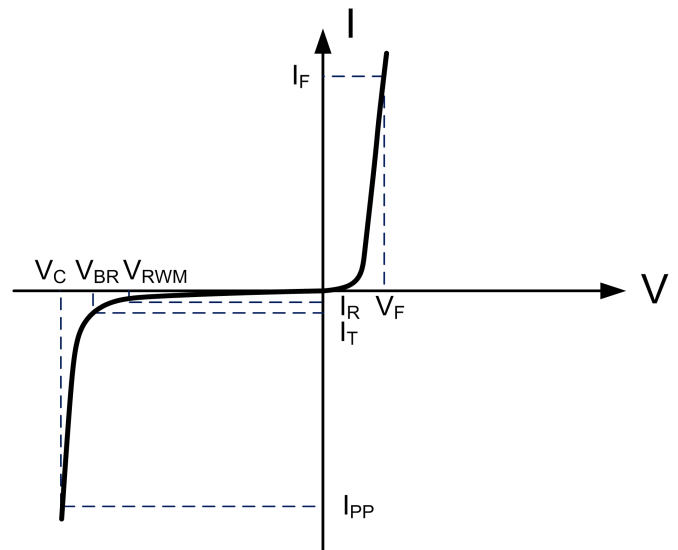
SOD-523 (Top View)

100W Surface Mount TVS For ESD Protection
Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	100	Watts
Peak Forward Voltage ($I_F = 1A$, $t_p = 8/20\mu s$)	V_{FP}	1.4	V
Operating Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Parameters (T=25°C)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F


Electrical Characteristics
DCE05523LCW

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$, $T = 25^\circ C$			1	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$			5	A
Clamping Voltage	V_C	$I_{PP} = 5A$, $t_p = 8/20\mu s$			13.6	V
Junction Capacitance	C_j	$V_R = 0V$, $f = 1MHz$		0.5	0.8	pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

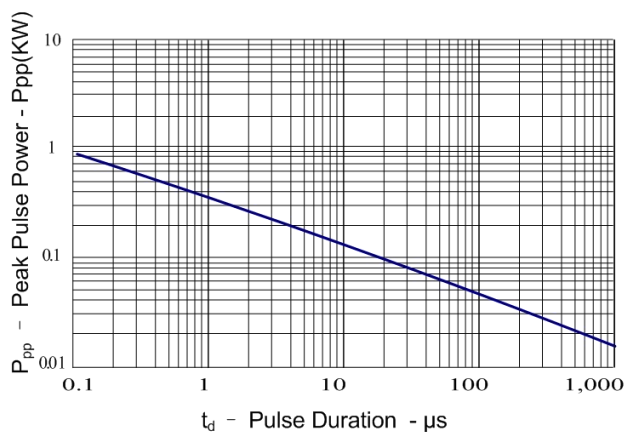


Figure 2: Power Derating Curve

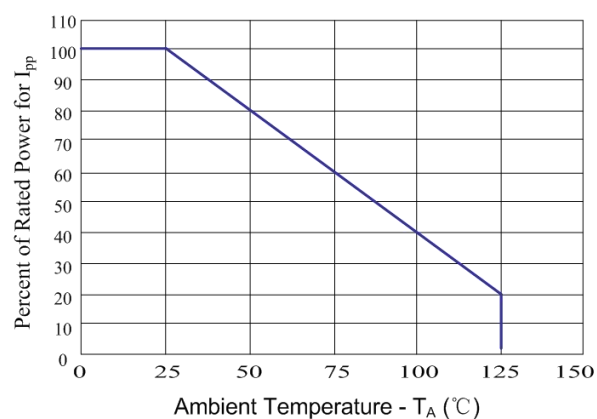


Figure 3: Insertion Loss

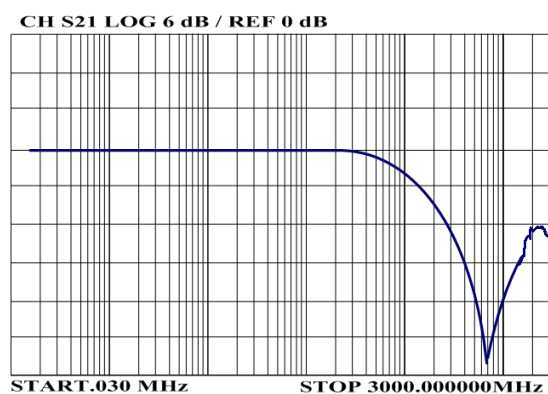


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

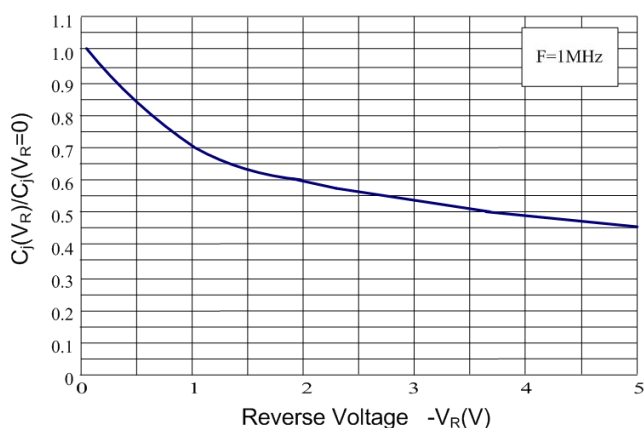
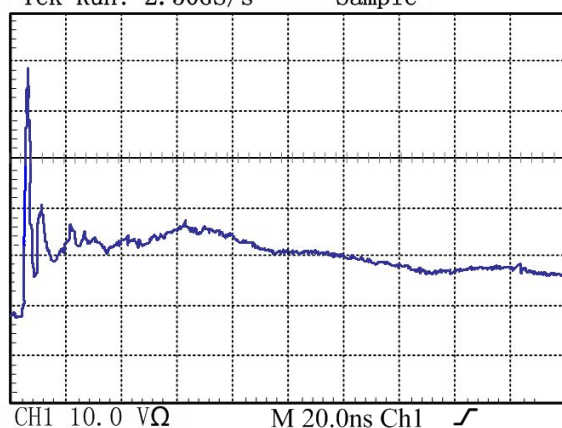


Figure 5: ESD Clamping(8kV Contact per IEC 61000-4-2)

Tek Run: 2.50GS/s

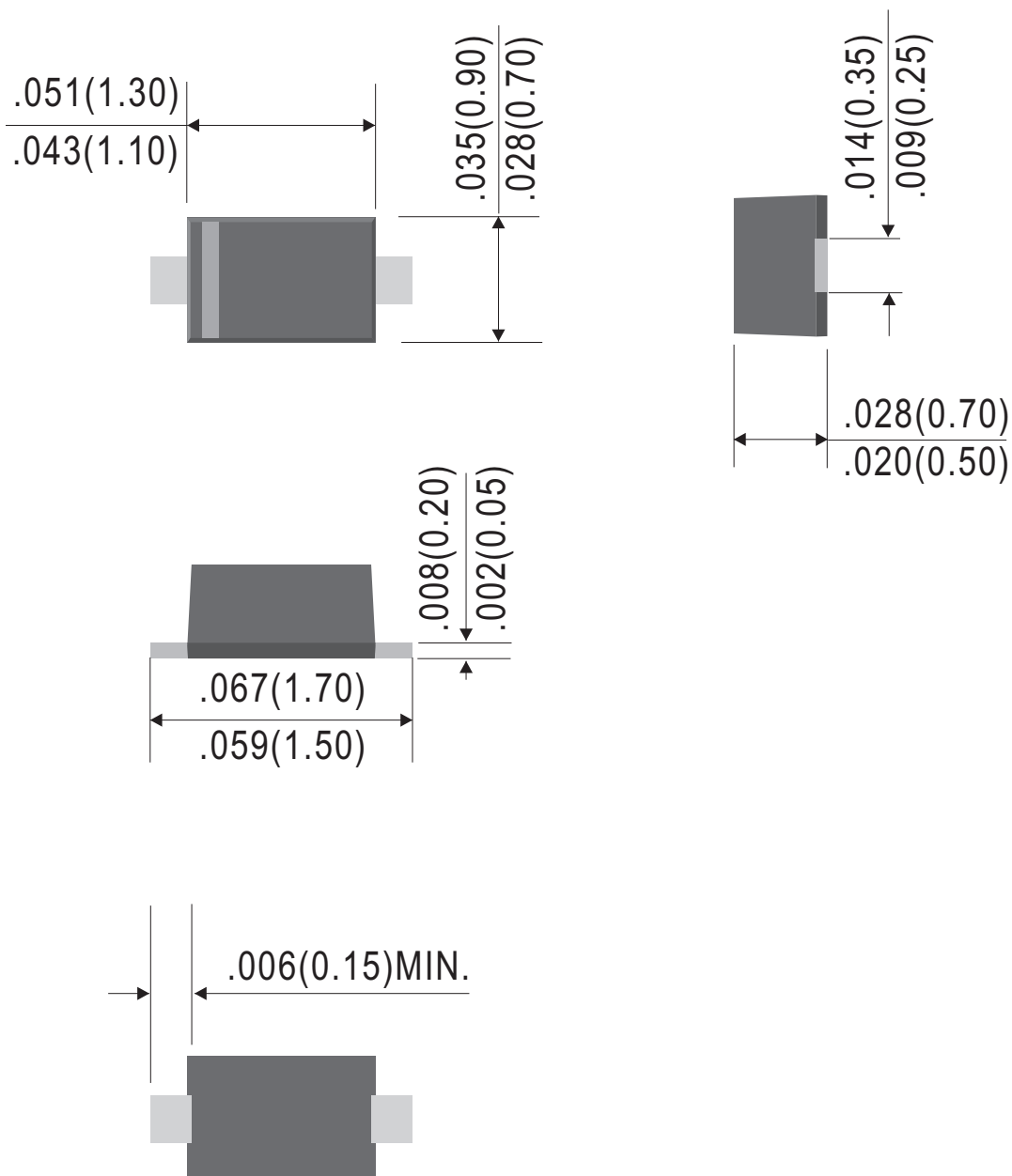
Sample





Outline Drawing

SOD-523



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
SESD5Z5LCW -T ⁽¹⁾ H ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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