

Electro-static Discharge (ESD)

SLC05C

Features

- 500Watts Peak Pulse Power per line($t_p=8/20\mu s$)
- Protects One Power or I/O Port
- Low Leakage Current
- Low Clamping Voltage
- Low Capacitance:5.0pF



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

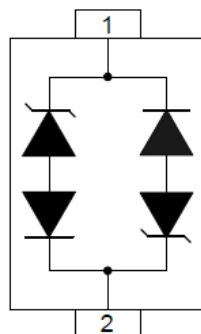
Mechanical Characteristics

- JEDEC SOD-323 package
- Molding compound flammability rating:
UL 94V-0
- Marking : Marking Code
- Packaging : Tape and Reel per EIA 481
- RoHS/WEEE Compliant

Applications

- Cellular Phones
- Personal Digital Assistants (PDAs)
- Ethernet-10/100/1000 Base T
- Handheld-Wireless Systems
- USB Interface

Schematic & PIN Configuration



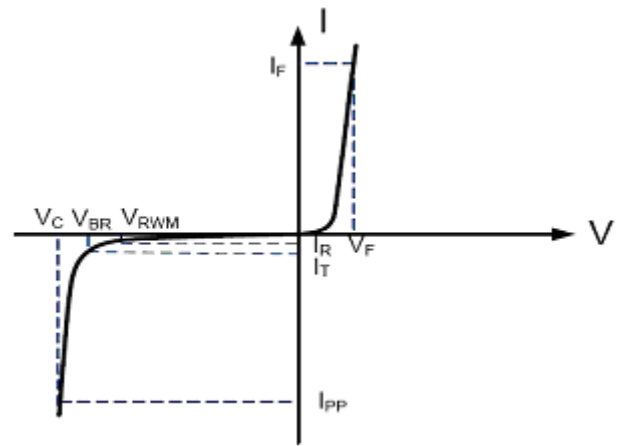
BIDIRECTIONAL

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power($t_P=8/20 \mu s$)	PPP	500	Watts
Operating Temperature	T_J	-55to+125	$^{\circ}C$
Storage Temperature	T_{STG}	-55to+150	$^{\circ}C$

Electrical Parameters (T=25 $^{\circ}C$)

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 Peak Pulse 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

Part No.	$V_{RWM}(V)$	$I_R(\mu A)$	$V_{BR}(V)$	C(PF)	$P_{PK}(W)$	Package
SLC05C	5.0	1.0	6.0-9.8	5	500	SOD323



Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

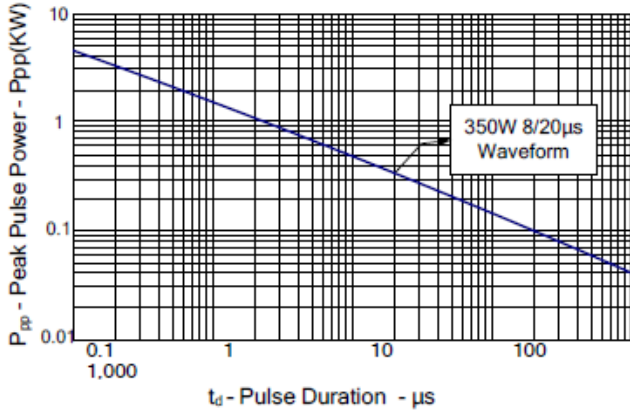


Figure 2: Power Derating Curve

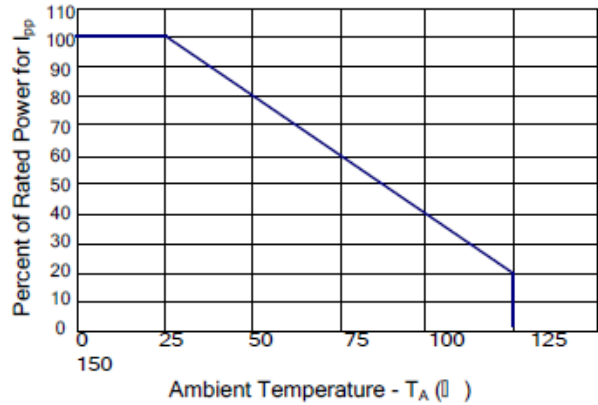


Figure 3: Clamping Voltage vs. Peak Pulse Current

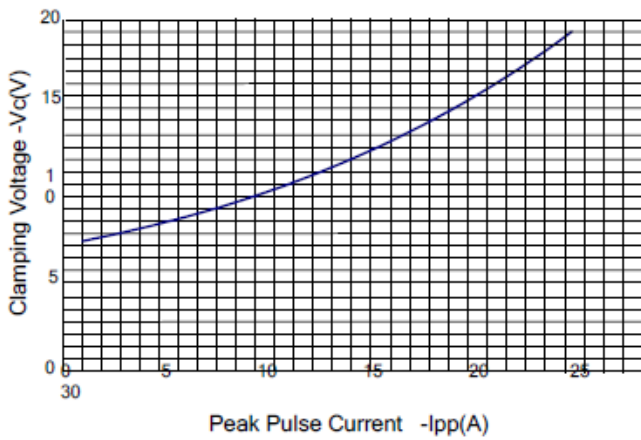


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

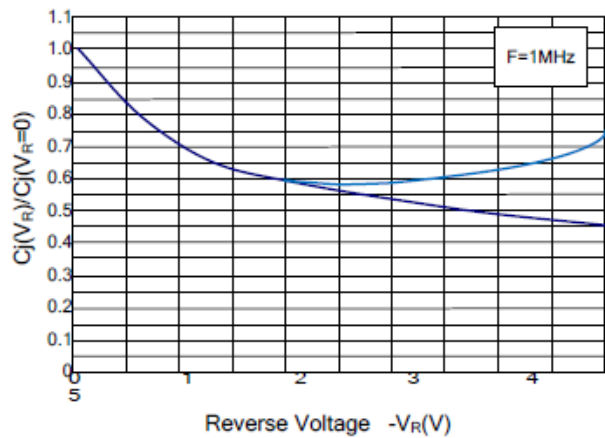


Figure 5: Pulse Waveform

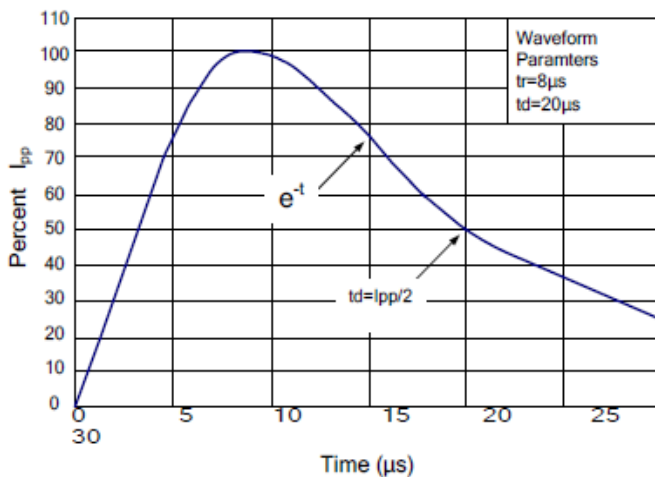
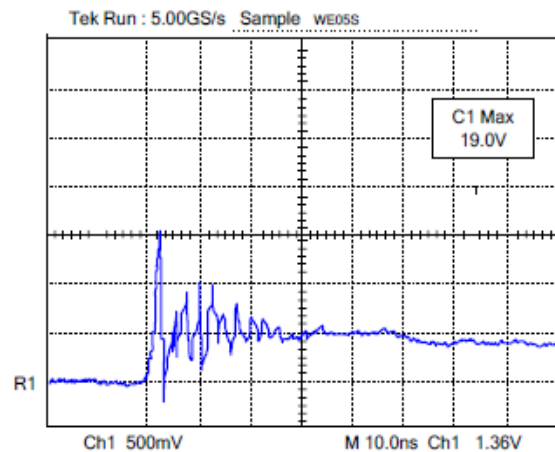
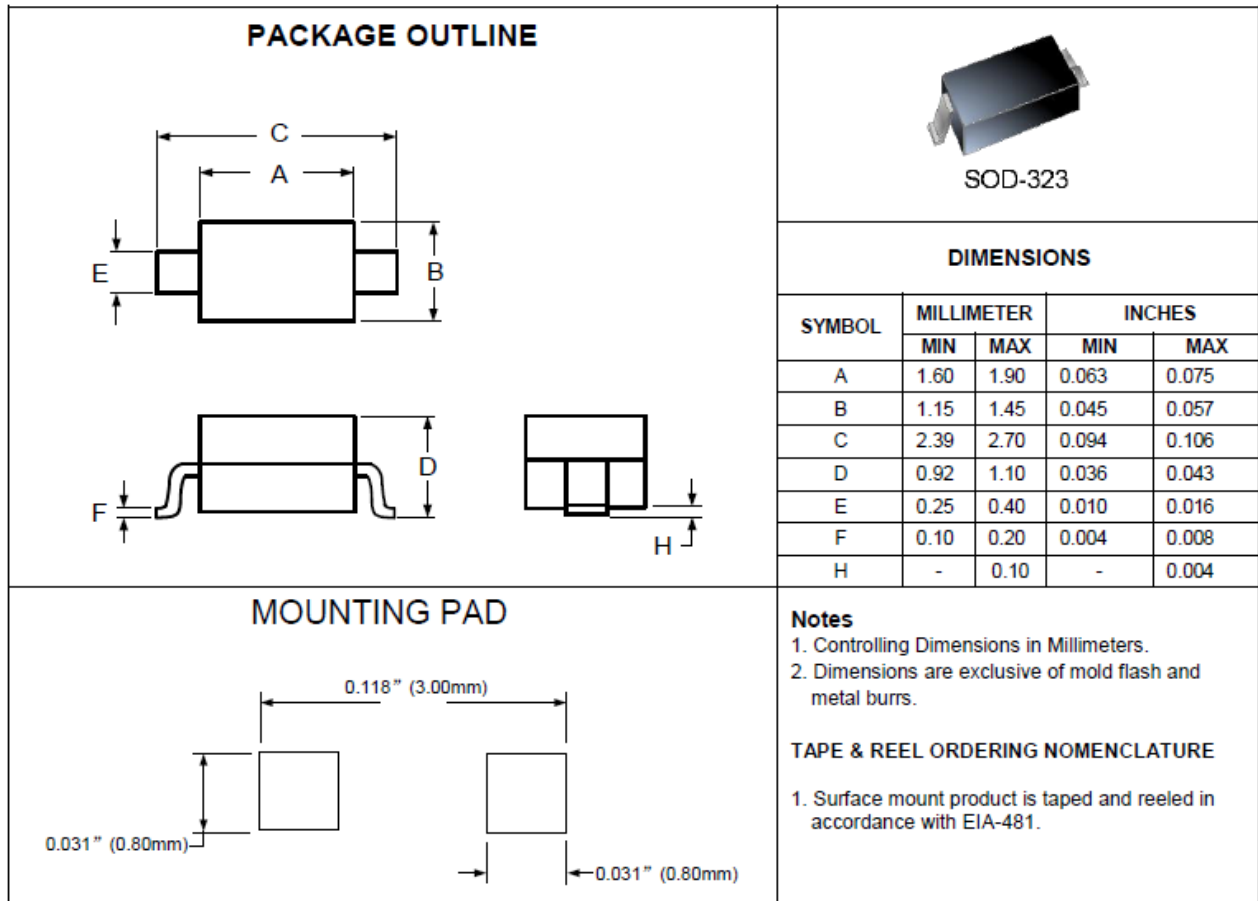


Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)



Outline Drawing – SOD-323



CONTACT INFORMATION

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