



Features

- 50 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Replacement for MLV (0603)
- Protects one I/O or power line
- Low Clamping Voltage
- Working Voltage: 3.3 V
- Low Leakage Current
- Response Time is Typically < 1 ns



IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) ± 15 kV (air), ± 8 kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

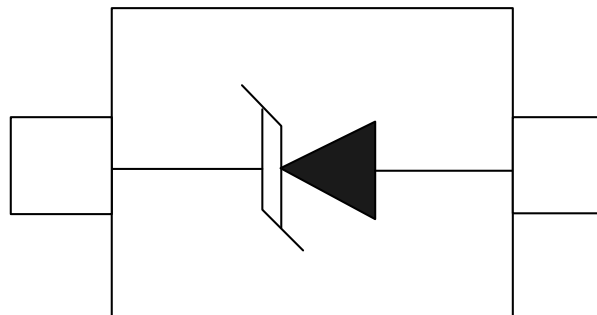
Mechanical Characteristics

- JEDEC SOD-523 package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS Compliant

Applications

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

Schematic & PIN Configuration

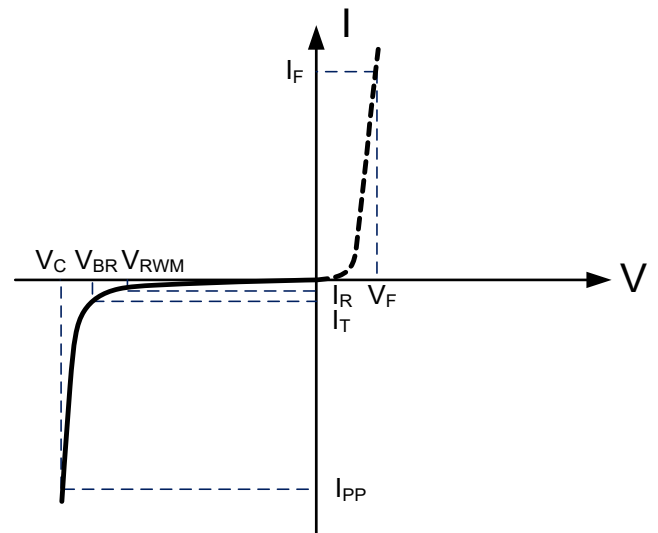


SOD-523 (Top View)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	50	Watts
Peak Forward Voltage ($I_F = 1A, t_p = 8/20\mu s$)	V_{FP}	1.5	V
Operating Temperature	T_J	-55 to + 125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

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

Symbol	Parameter
I_{PP}	Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	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

DW03D5LC-E						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	3.7			V
Reverse Leakage Current	I_R	$V_{RWM} = 3.3V, T = 25^{\circ}C$			1	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$			3	A
Clamping Voltage	V_C	$I_{PP} = 3A, t_p = 8/20\mu s$		9	12	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		8		pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

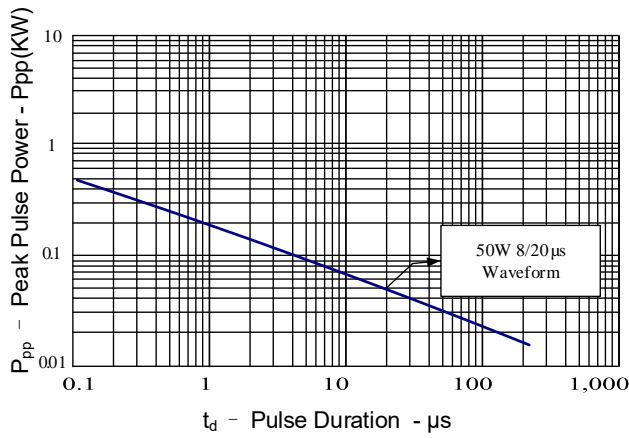


Figure 2: Power Derating Curve

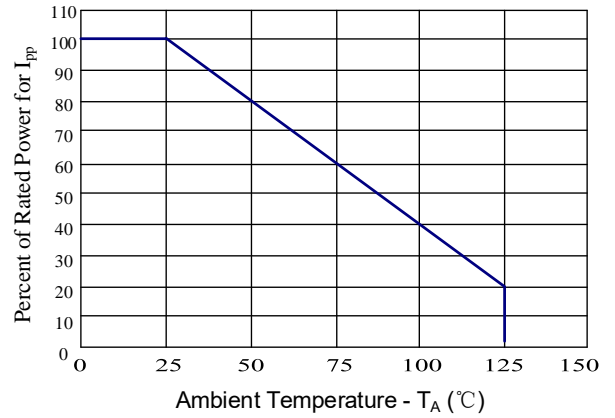


Figure 3: DW03D5LC-E Insertion Loss

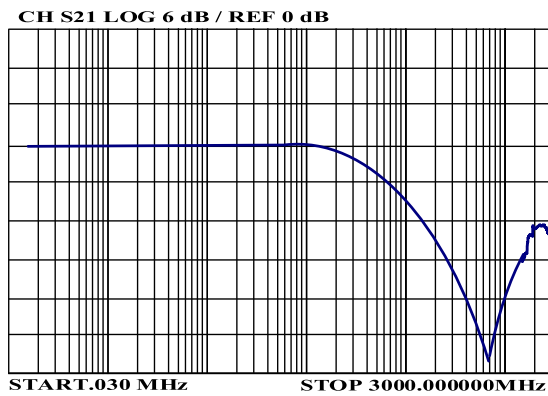


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

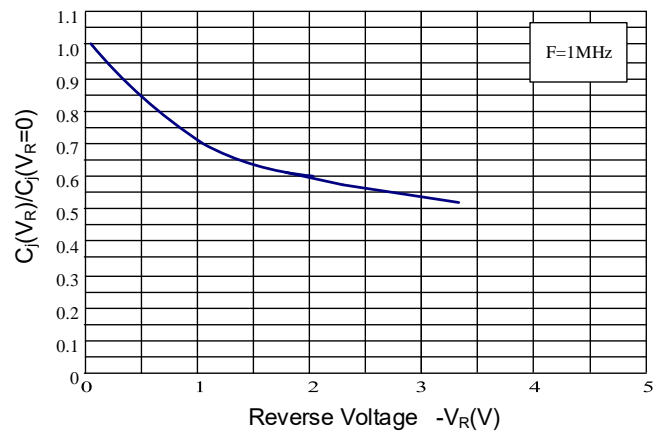
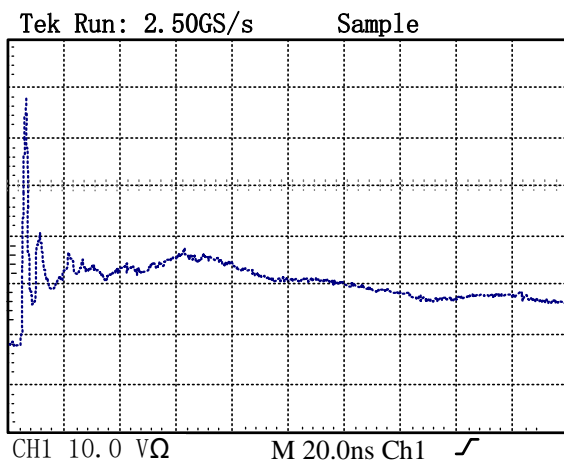
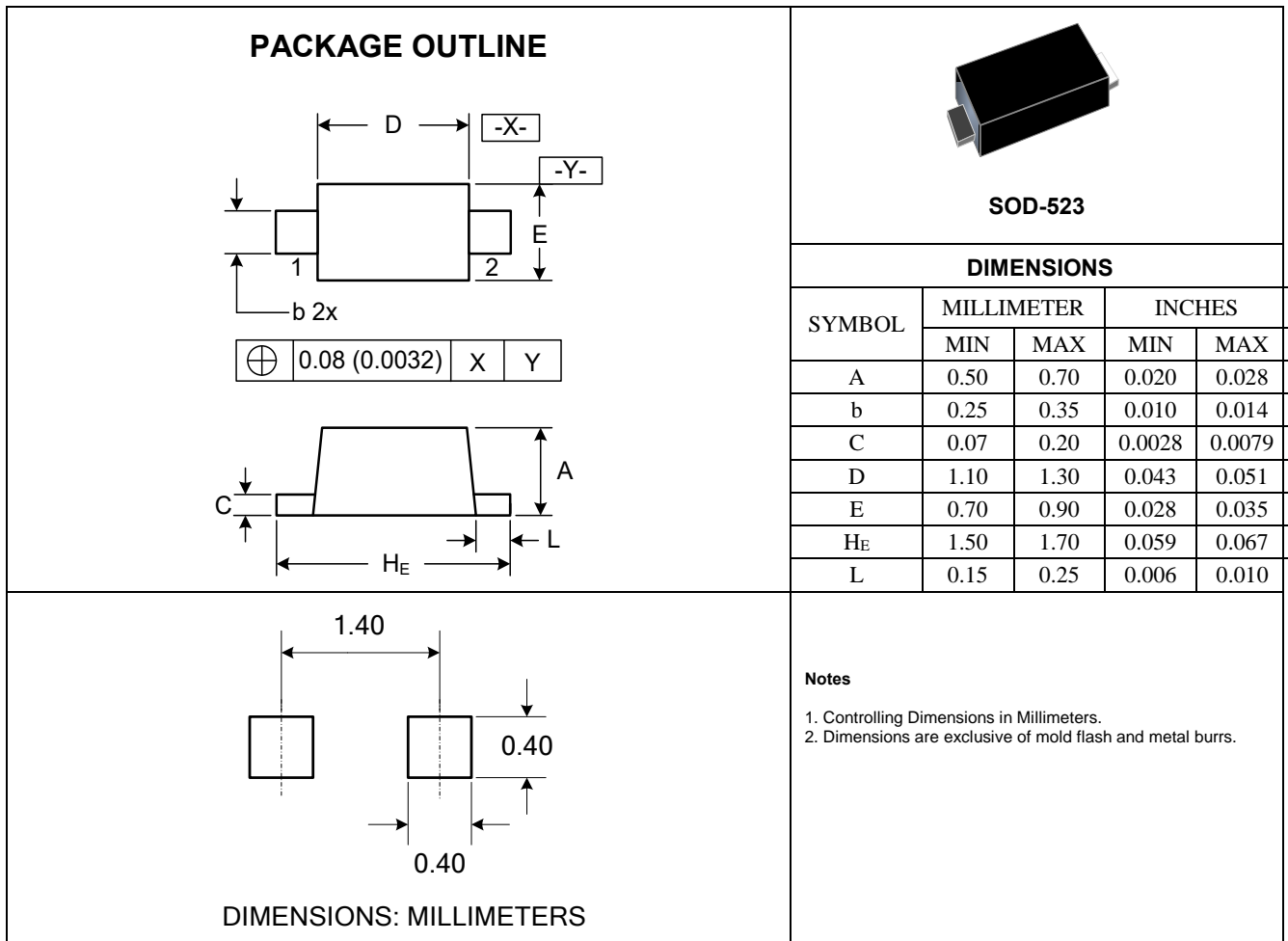


Figure 5: ESD Clamping(8kV Contact per IEC 61000-4-2)



Outline Drawing – SOD-523



Marking Codes

Part Number	DW03D5LC-E
Marking Code	3LC

Package Information

Qty: 5k/Reel