



Features

- Small Body Outline Dimensions: 0.059"x 0.026"(1.5 mm x 0.65 mm)Max
- Low Body Height: 0.026"(0.65 mm) Max
- Protects one line
- Working Voltage: 3.3 V
- Low Leakage Current
- Response Time is Typically < 1 ns



IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 20\text{kV}$ (air), $\pm 15\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 15A (8/20 μs)

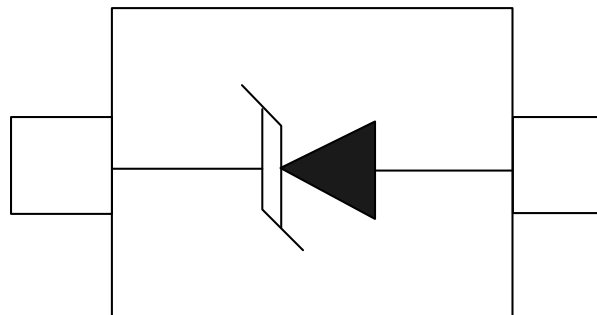
Mechanical Characteristics

- 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

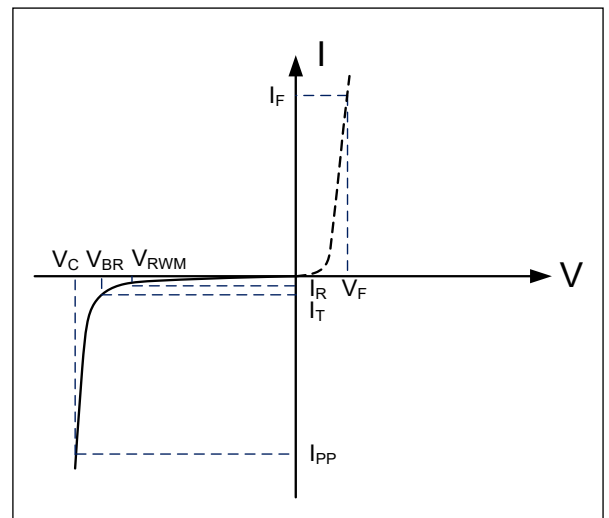


SOD-523 (Top View)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	250	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	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Parameters (T=25°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

DW03D5-S						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	4.0			V
Reverse Leakage Current	I_R	$V_{RWM} = 3.3V, T = 25C$			0.5	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$			15	A
Clamping Voltage	V_C	$I_{PP} = 15A, t_p = 8/20\mu s$		15		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		110		pF

Typical Characteristics

Figure 1: Peak Pulse Power Vs Pulse Time

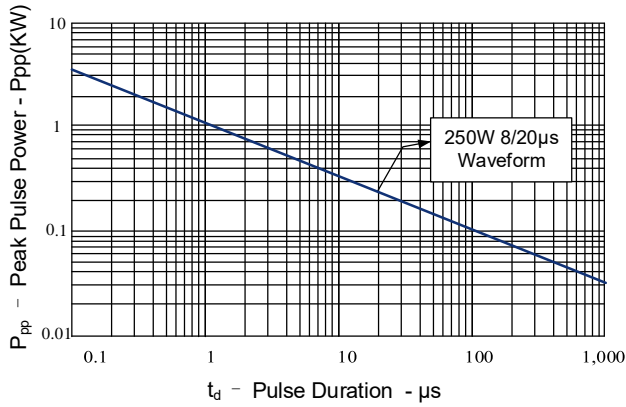


Figure 2: Power Derating Curve

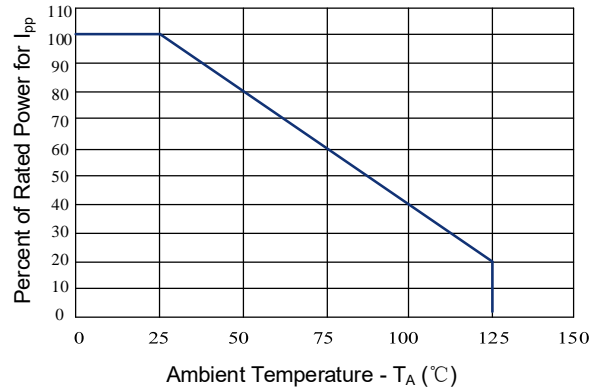


Figure 3: Clamping Voltage vs. Peak Pulse Current

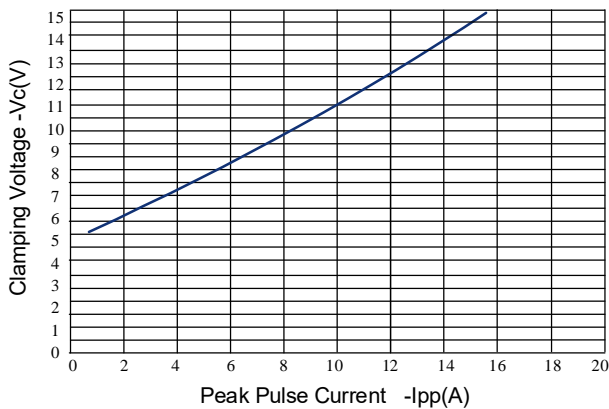


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

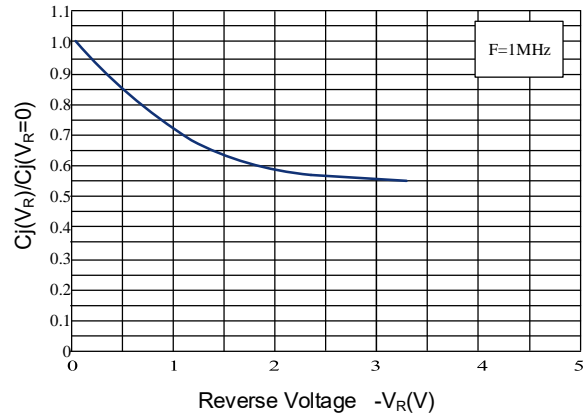


Figure 5: Pulse Waveform

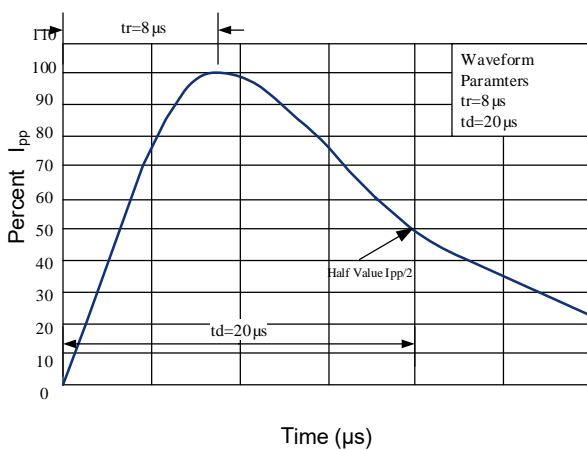
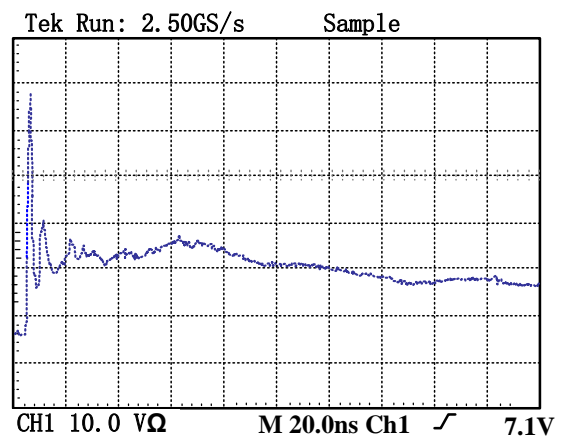
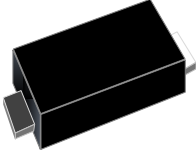
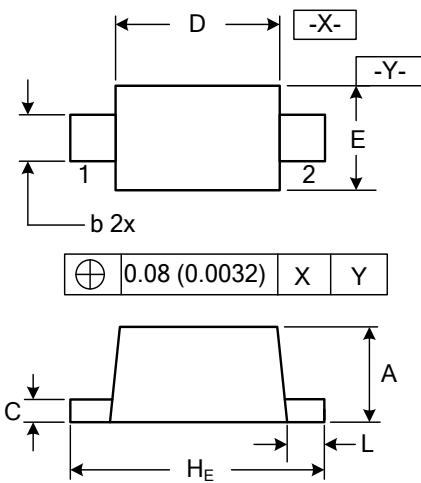
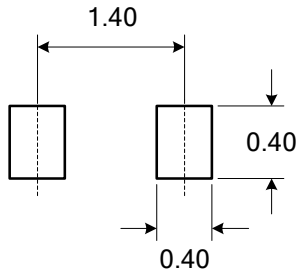


Figure 6: ESD Clamping (8kV Contact per IEC 61000-4-2)



Outline Drawing – SOD-523

PACKAGE OUTLINE		 SOD-523			
		DIMENSIONS			
SYMBOL	MILLIMETE R		INCHES		
	MIN	MAX	MIN	MAX	
A	0.50	0.70	0.020	0.028	
b	0.25	0.35	0.010	0.014	
C	0.07	0.20	0.0028	0.0079	
D	1.10	1.30	0.043	0.051	
E	0.70	0.90	0.028	0.035	
H _E	1.50	1.70	0.059	0.067	
L	0.15	0.25	0.006	0.010	
 <p style="text-align: center;">DIMENSIONS: MILLIMETERS</p>		<p>Notes</p> <p>1. Controlling Dimensions in Millimeters. 2. Dimensions are exclusive of mold flash and metal burrs.</p>			

Marking Codes

Part Number	DW03D5-S
Marking Code	D3

Package Information

Qty: 5k/Reel