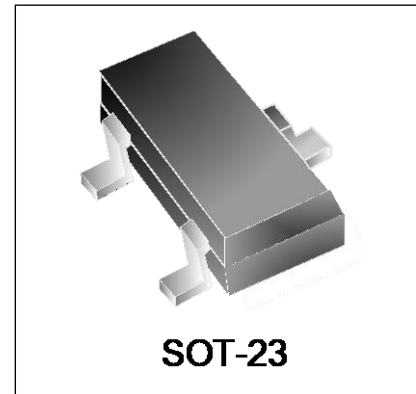


### Features

- 350 watts peak pulse power ( $t_p = 8/20\mu s$ )
- Low Clamping Voltage
- Working Voltages: 3.3V
- Low Leakage Current
- Response Time is Typically  $< 1\text{ ns}$

### IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD)  $\pm 30\text{kV}$  (air),  $\pm 30\text{kV}$  (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 20A (8/20 $\mu s$ )



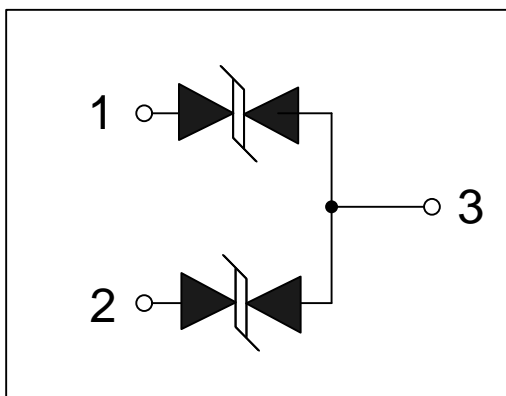
### Mechanical Characteristics

- JEDEC SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS Compliant

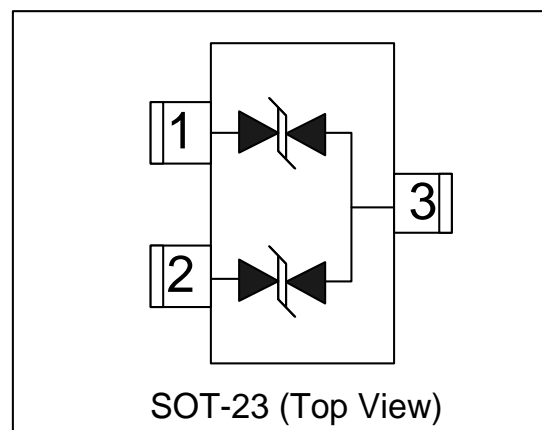
### Applications

- RS-232, RS-422 & RS-485
- Cellular Handsets and Accessories
- Control & Monitoring Systems
- Portable Electronics
- Set-Top Box
- Servers, Notebook, and Desktop PC
- Wireless Bus Protection

### Circuit Diagram



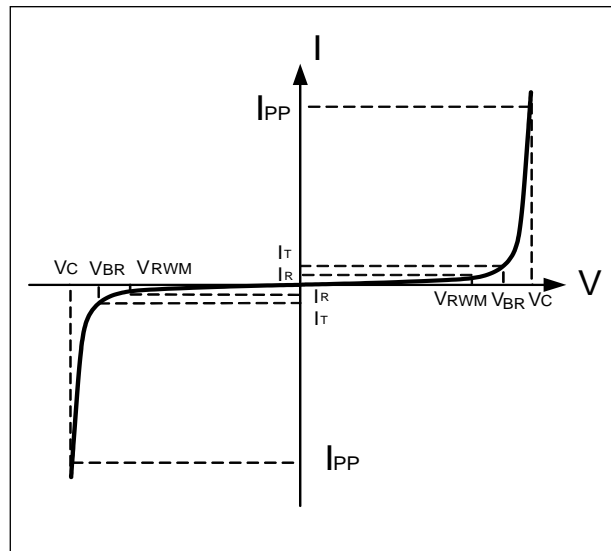
### Schematic & PIN Configuration



Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PP}$	350	Watts
Lead Soldering Temperature	$T_L$	260(10sec)	$^{\circ}C$
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 @ $I_F$

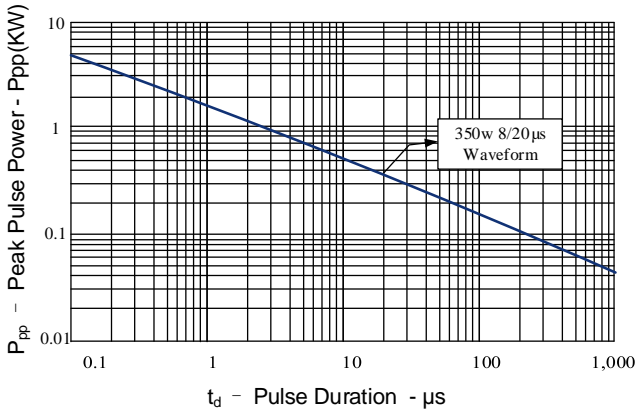


## Electrical Characteristics

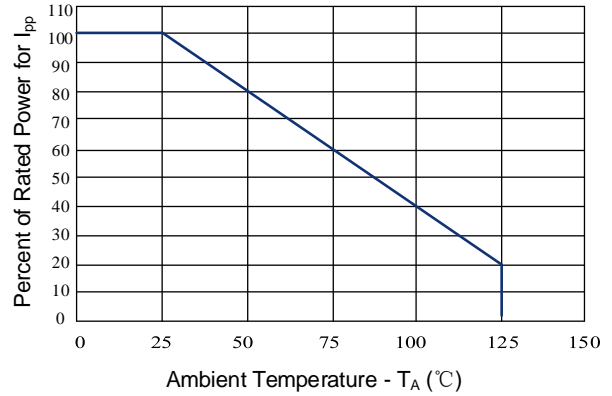
DW03M2T-B-S						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	4			V
Reverse Leakage Current	$I_R$	$V_{RWM}=3.3V, T=25^{\circ}C$			1	$\mu A$
Peak Pulse Current	$I_{PP}$	$t_p = 8/20\mu s$			20	A
Clamping Voltage	$V_C$	$I_{PP}=1A, t_p=8/20\mu s$			7	V
Maximum Clamping Voltage	$V_C$	$I_{PP}=20A, t_p=8/20\mu s$			15	V
Junction Capacitance	$C_j$	Pin 1 to 3 and Pin 2 to 3 $V_R = 0V, f = 1MHz$		100		pF

# Typical Characteristics

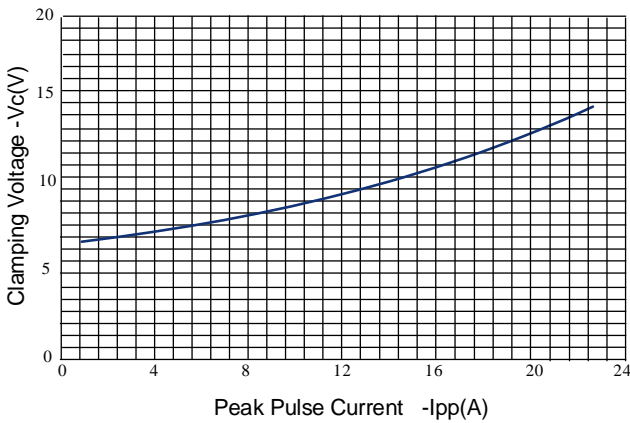
**Figure 1: Peak Pulse Power vs. Pulse Time**



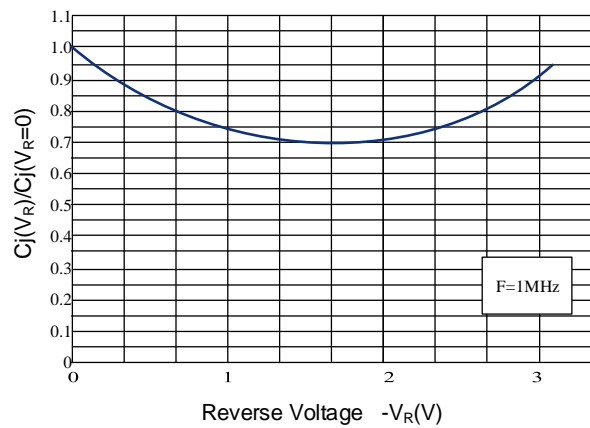
**Figure 2: Power Derating Curve**



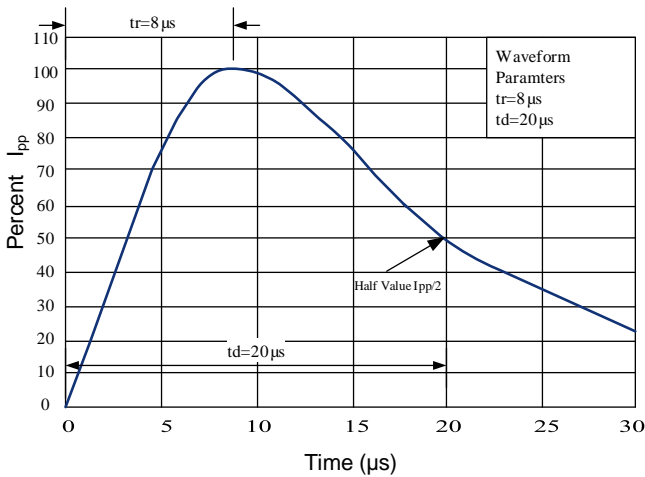
**Figure 3: Clamping Voltage vs. Peak Pulse Current**



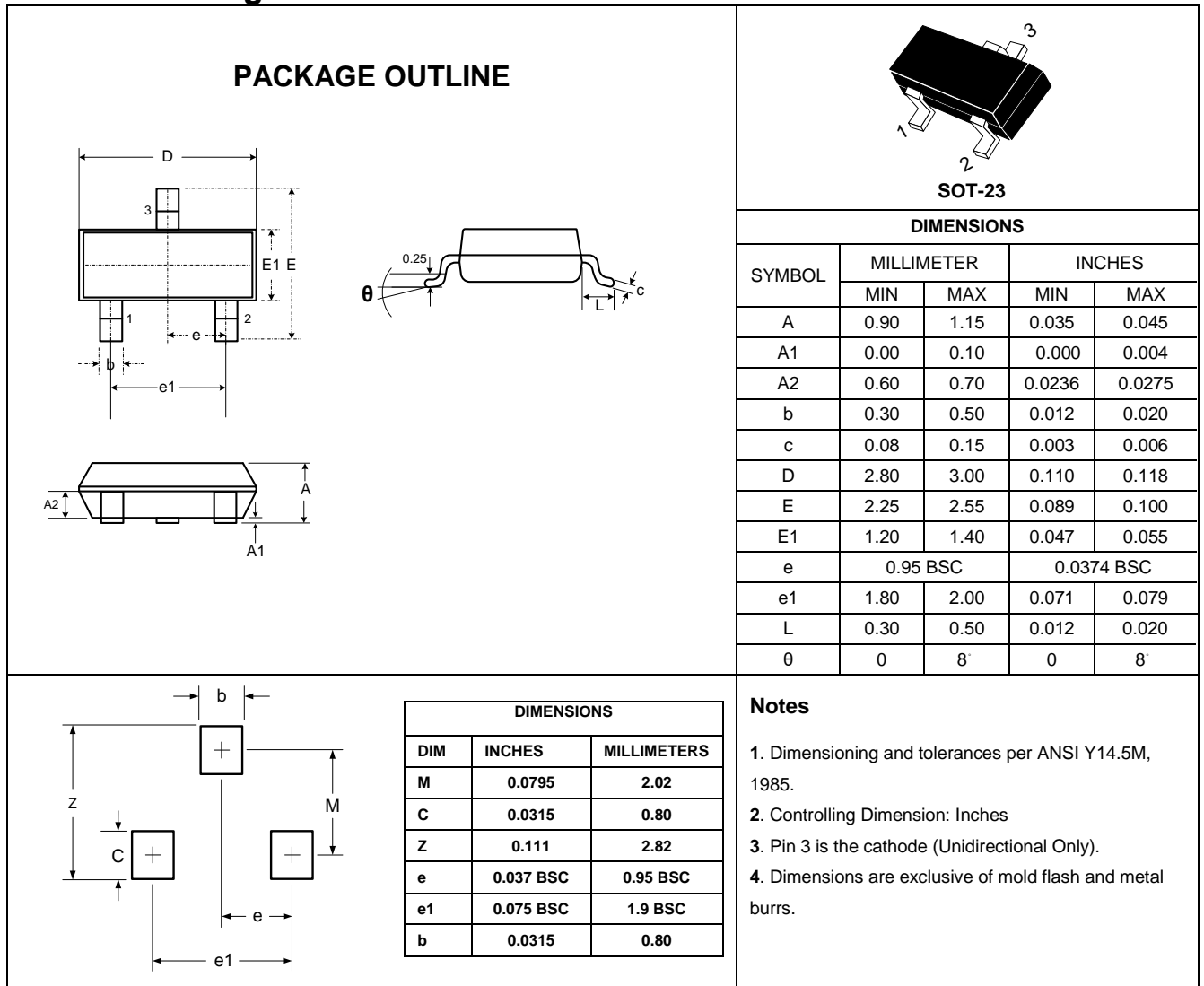
**Figure 4: Normalized Junction Capacitance vs. Reverse Voltage**



**Figure 5: Pulse Waveform**



## Outline Drawing – SOT-23



## Marking Codes

Part Number	DW03M2T-B-S
Marking Code	3B2

## Package Information

Qty: 3k/Reel