

**Unidirectional TVS Diodes**

**FEATURES**

- ◆IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- ◆IEC61000-4-4 (EFT) 40A (5/50ns)
- ◆350 Watts Peak Pulse Power per (tp=8/20µs)
- ◆Protects one I/O line (unidirectional)
- ◆Low clamping voltage
- ◆Working voltages : 6V
- ◆Low leakage current

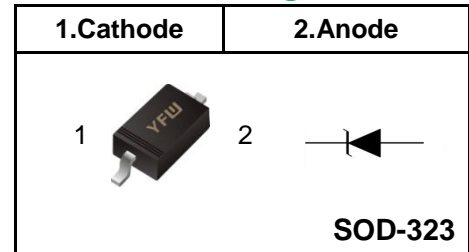
**MACHANICAL DATA**

- ◆SOD-323 package
- ◆Flammability Rating: UL 94V-0
- ◆High temperature soldering guaranteed:260°C/10s
- ◆MSL1

**APPLICATIONS**

- ◆Cell Phone Handsets and Accessories
- ◆Microprocessor based equipment
- ◆Personal Digital Assistants (PDA's)
- ◆Notebooks, Desktops, and Servers
- ◆Portable Instrumentation
- ◆Networking and Telecom
- ◆Serial and Parallel Ports.
- ◆Peripherals

**Pinning**



**ABSOLUTE MAXIMUM RATING**

Parameters	Symbol	Value	Unit
ESD per IEC61000-4-2(Air)	<b>V<sub>ESD</sub></b>	±15	kV
ESD per IEC61000-4-2(Contact)		±8	
Peak Pulse Power (8/20us)	<b>P<sub>PP</sub></b>	350	W
Operating temperature	<b>T<sub>OPT</sub></b>	-55-+150	°C
Storage temperature range	<b>T<sub>STG</sub></b>	-55-+150	°C
Lead Soldering temperature	<b>T<sub>L</sub></b>	260(10 sec.)	°C

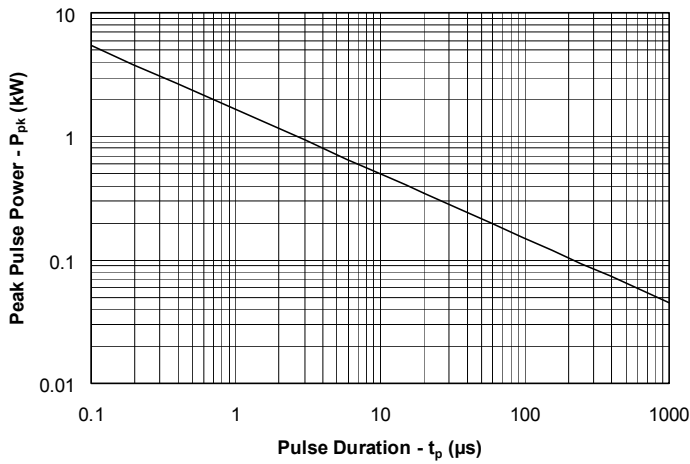
**Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified

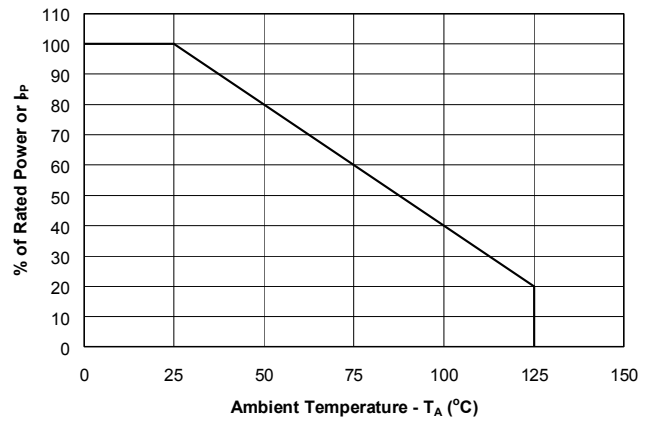
PART NUMBER	DEVICE MARKING	V <sub>RWM</sub> (V) (max.)	V <sub>B</sub> (V) (min.)	I <sub>T</sub> (mA)	V <sub>C@1A</sub> (V) (max.)	V <sub>C</sub> (V) (max.) (@A)	I <sub>R</sub> (uA) (max.)	C <sub>T</sub> (pF) (max.)
ESD3Z6.0	6A	6	6	1	9.8	18    17	10	300

**ELECTRICAL CHARACTERISTICS CURVE**

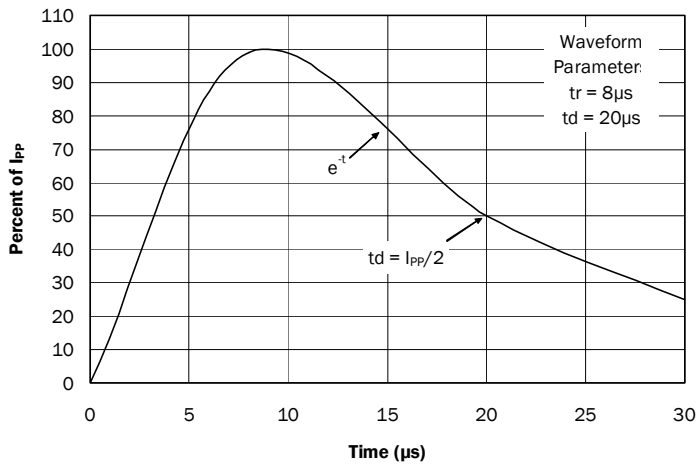
**Non-Repetitive Peak Pulse Power vs. Pulse Time**



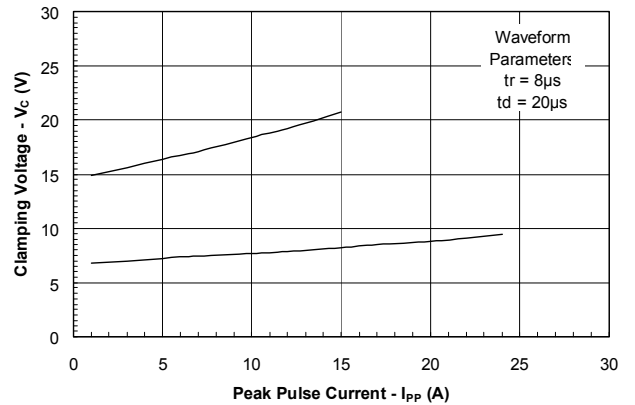
**Power Derating Curve**



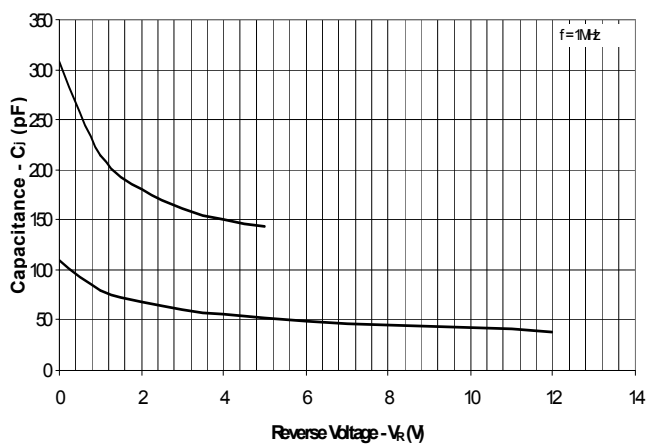
**Pulse Waveform**



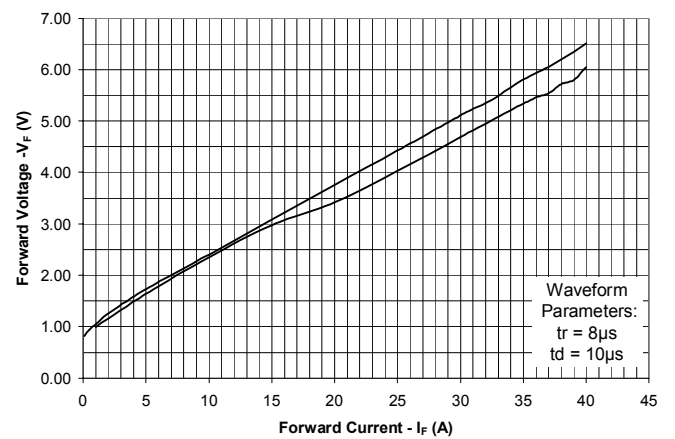
**Clamping Voltage vs. Peak Pulse Current**



**Capacitance vs. Reverse Voltage**



**Forward Voltage vs. Forward Current**



**Ordering information**

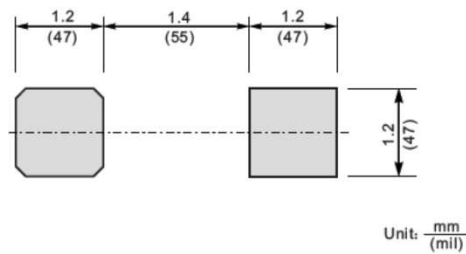
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

**Package Dimensions**

**SOD-323**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

**The recommended mounting pad size**



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