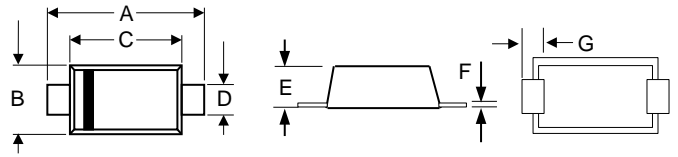


### Features

- \* Excellent clamping capability
- \* Low leakage
- \* Fast response time
- \* For ESD protection
- \* Marking Code: "6"



RoHS  
COMPLIANT



SOD-523F				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.50	1.70
B	0.030	0.033	0.75	0.85
C	0.045	0.049	1.15	1.25
D	0.012	0.016	0.30	0.40
E	0.024	0.028	0.60	0.70
F	0.004	0.005	0.10	0.14

### Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

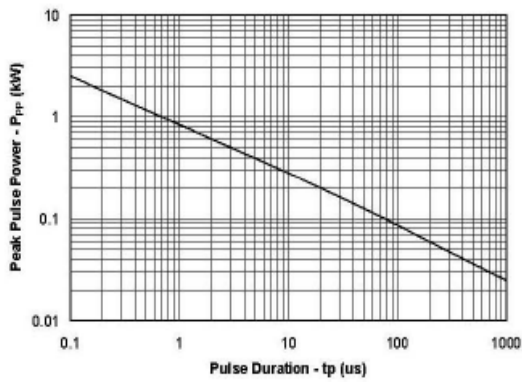
Parameter	Symbol	Value	Unit
Reverse Stand-Off Voltage	V <sub>R</sub>	5	V
Peak Pulse Current (t <sub>p</sub> = 8/20 μs)	I <sub>PP</sub>	16	A
IEC61000-4-2 (ESD) Air Contact	V <sub>PP</sub>	± 20 ± 15	KV
Peak Pulse Power (t <sub>p</sub> = 8/20 μs)	P <sub>PK</sub>	200	W
Operation Temperature Range	T <sub>j</sub>	- 55 to + 125	°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 150	°C

### Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

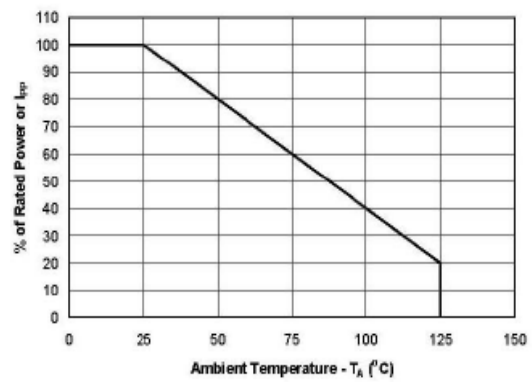
Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I <sub>R</sub> = 1 mA	V <sub>(BR)R</sub>	6	-	V
Forward Voltage at I <sub>F</sub> = 10 mA	V <sub>F</sub>	-	0.9	V
Reverse Current at V <sub>R</sub> = 5 V	I <sub>R</sub>	-	1	μA
Clamping Voltage at I <sub>PP</sub> = 5 A, t <sub>p</sub> = 8/20 μs at I <sub>PP</sub> = 16 A, t <sub>p</sub> = 8/20 μs	V <sub>C</sub>	- -	9.8 12.5	V
Junction Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>j</sub>	-	160	pF

### Ratings and Characteristic Curves

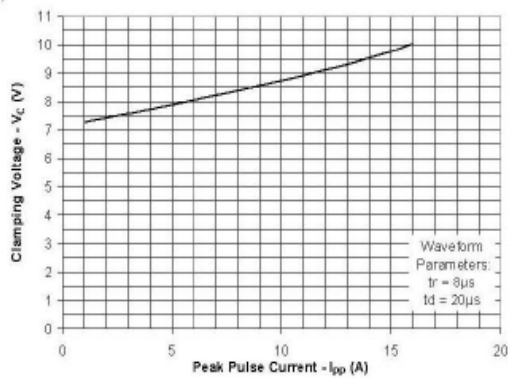
Non-Repetitive Peak Pulse Power vs. Pulse Time



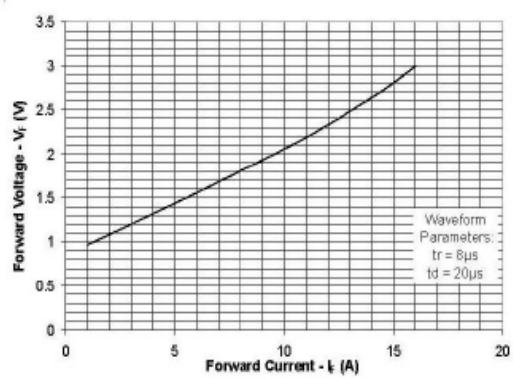
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current



Forward Voltage vs. Forward Current





# ESD0501WT

*Transient Voltage Suppressor*

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## Ordering Information

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Part No.	Package	Packing Code	Packing
ESD0501WT	SOD-523F	R30	3000pcs/Reel

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