

ESD0501WT

Transient Voltage Suppressors

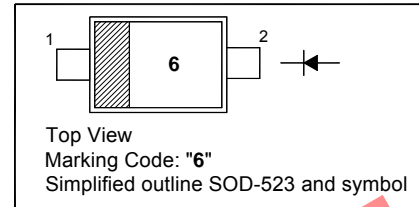
for ESD Protection

Features

- Excellent clamping capability
- Low leakage
- Fast response time

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

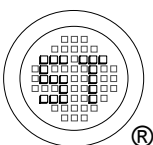


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Stand-Off Voltage	V_R	5	V
Peak Pulse Current ($t_p = 8/20\text{ }\mu\text{s}$)	I_{PP}	16	A
IEC61000-4-2 (ESD) Air Contact	V_{PP}	± 20 ± 15	KV
Peak Pulse Power ($t_p = 8/20\text{ }\mu\text{s}$)	P_{PK}	200	W
Operation Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	6	-	V
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	0.9	V
Reverse Current at $V_R = 5\text{ V}$	I_R	-	1	μA
Clamping Voltage at $I_{PP} = 5\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$ at $I_{PP} = 16\text{ A}$, $t_p = 8/20\text{ }\mu\text{s}$	V_C	- -	9.8 12.5	V
Junction Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_j	-	160	pF

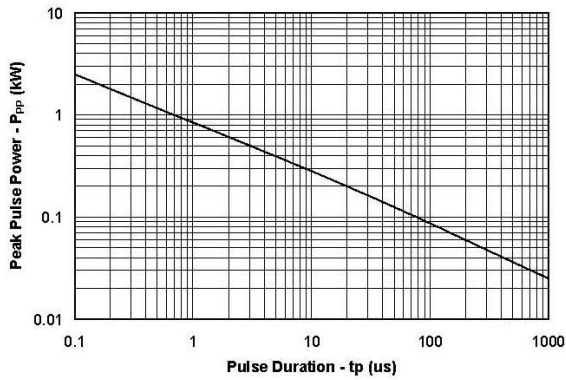


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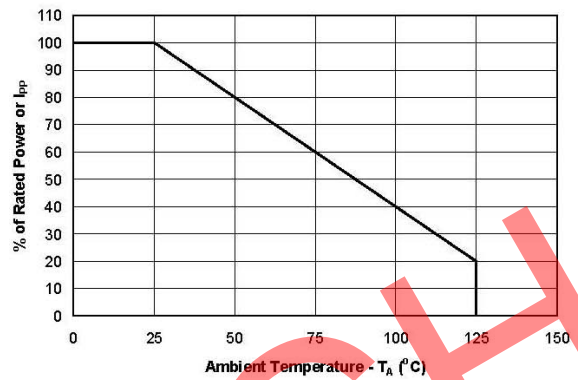


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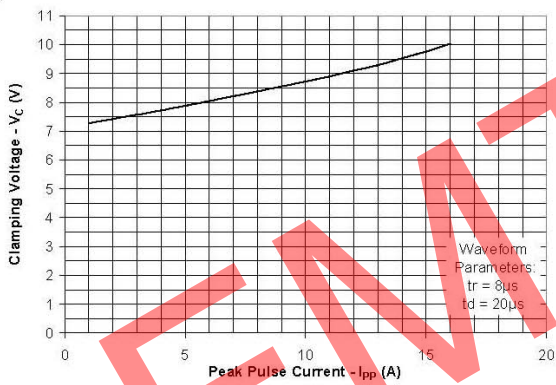
Non-Repetitive Peak Pulse Power vs. Pulse Time



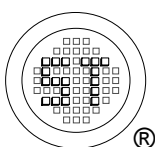
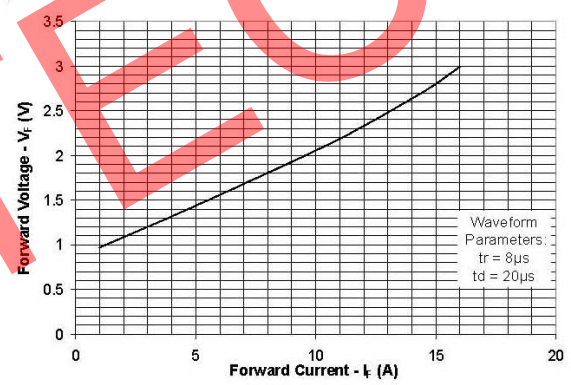
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current



Forward Voltage vs. Forward Current



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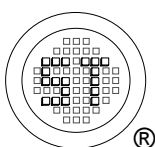
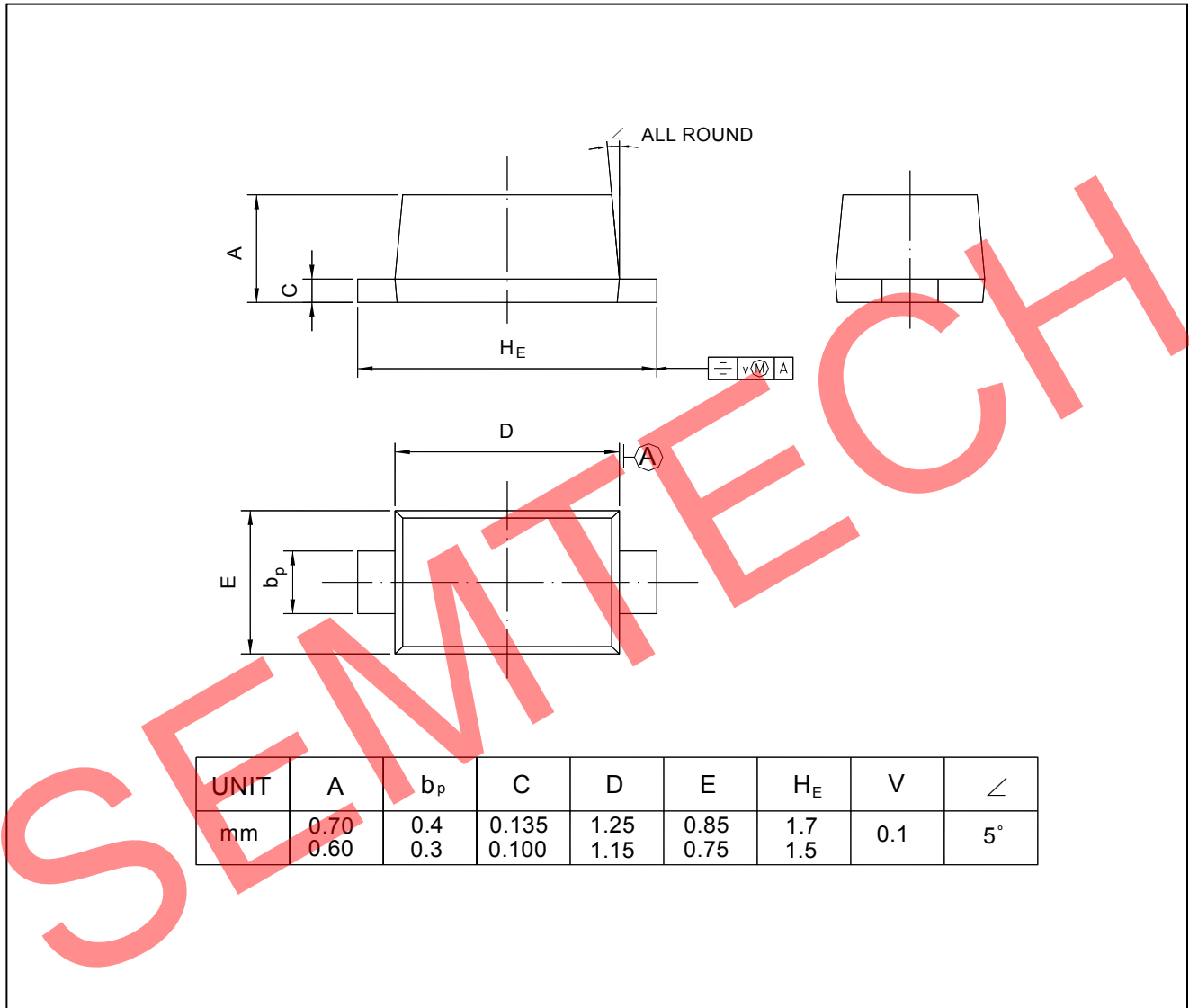


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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



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