

Transient Voltage Suppressors

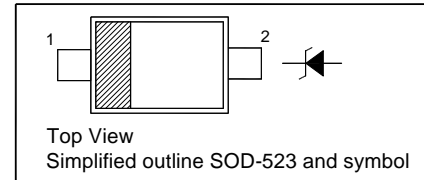
for ESD Protection

Features

- Excellent clamping capability
- Low leakage
- Fast response time

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit
IEC61000-4-2 (ESD) Air Contact	V _{ESD}	± 30 ± 30	KV
ESD Voltage Per Human Body Model Per Machine Model	V _{ESD}	16 400	KV V
Power Dissipation on FR-5 Board	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

Characteristics at T_a = 25°C (V_F = 1.1 V Max. at I_F = 10 mA)

Type	Marking Code	Reverse Stand-off Voltage		Reverse Current		Breakdown Voltage		Clamping Voltage			Reverse Peak Pulse Current	Peak Power Dissipation	Capacitance
		V _{RWM}	I _R at V _{RWM}	V _{BR}	at I _T	V _C	at I _{PP}	V _C at Max. I _{PP}	I _{PP}	P _{pk}	C _j		
		Max. (V)	Max. (µA)	Min. (V)	(mA)	Typ. (V)	(A)	Max. (V)	Max. (A)	Max. (W)	Typ. (pF)		
ESD5Z2V5	02	2.5	6	4	1	6.5	5	10.9	11	120	145		
ESD5Z3V3	03	3.3	0.05	5	1	8.4	5	14.1	11.2	158	105		
ESD5Z5V0	05	5	0.05	6.2	1	11.6	5	18.6	9.4	174	80		
ESD5Z6V0	06	6	0.01	6.8	1	12.4	5	20.5	8.8	181	70		
ESD5Z7V0	07	7	0.01	7.5	1	13.5	5	22.7	8.8	200	65		
ESD5Z9V0	09	9	0.5	9	1	11.5	5	15	13.3	200	92		
ESD5Z12	12	12	0.01	14.1	1	17	5	25	9.6	240	55		

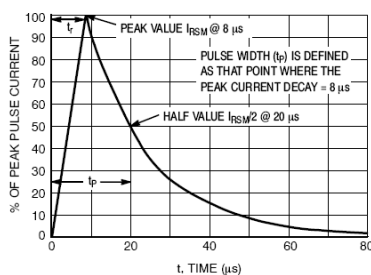
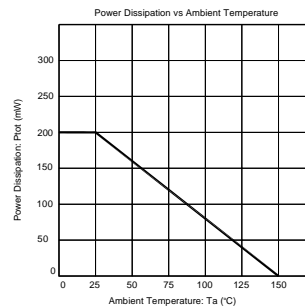


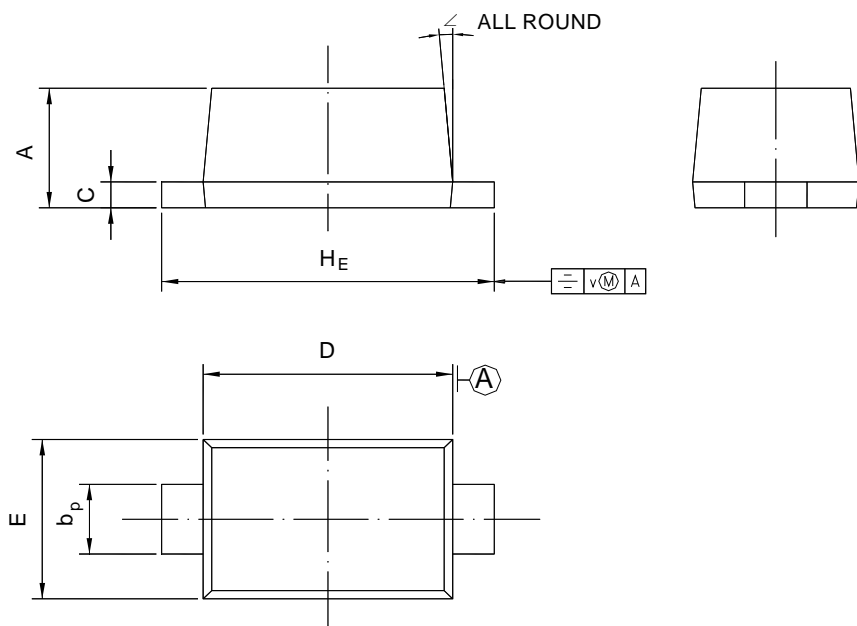
Figure 1. 8 x 20 µs Pulse Waveform



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°