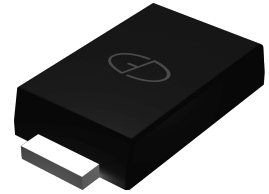


Features

- Glass passivated junction
- Excellent clamping capability and Fast response time
- 400W peak pulse power capability with a 10/1000us waveform
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10s
- Low profile, typical thickness 1.0mm



(SMAF)

Applications

For use in sensitive electronics protection against voltage transients induced by lightning or inductive load switching. Key applications include protection of I/O interfaces, industrial and LED lighting applications, DC power buses, and other vulnerable circuits used in consumer electronics.



Maximum Ratings and Thermal Characteristics

(T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000us waveform	P _{PPM}	Minimum 400	W
Peak pulse current with a 10/1000us waveform	I _{PPM}	See Next Table	A
Steady state power dissipation on infinite heatsink	P _{M(AV)}	1	W
Peak forward surge current, 8.3ms single half sine-wave	I _{FSM}	40.0	A
Maximum instantaneous forward voltage at 25A	V _F	3.5	V
Thermal resistance junction to ambient air	R _{thja}	85	/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175	

Note1: Thermal resistance from junction to mount, mounted on PCB with 8.0×8.0mm copper pads



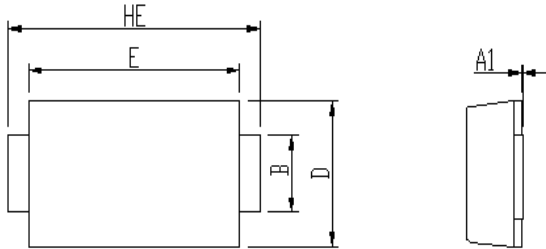
S4TVS10A thru S4TVS64A

Surface Mount Transient Voltage Suppressors
Peak Pulse Power 400W Stand-off Voltag10V to 64V

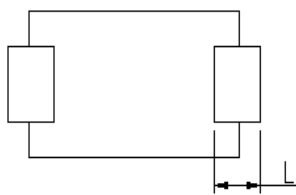
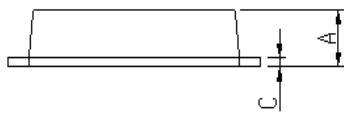
Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max Reverse Leakage Current	Max. Clamp Voltage	Peak Pulse Current
	VRWM	VBR @ IT		IT	IR @ VRWM	Vc @ IPP	IPP
		Min	Max				
	V	V	V	mA	µA	V	A
S4TVS10A	10	11.1	12.3	1	2.5	17	23.5
S4TVS11A	11	12.2	13.5	1	2.5	18.2	22
S4TVS12A	12	13.3	14.7	1	2.5	19.9	20.1
S4TVS13A	13	14.4	15.9	1	0.1	21.5	18.6
S4TVS14A	14	15.6	17.2	1	0.1	23.2	17.2
S4TVS15A	15	16.7	18.5	1	0.1	24.4	16.4
S4TVS16A	16	17.8	19.7	1	0.1	26	15.4
S4TVS17A	17	18.9	20.9	1	0.1	27.6	14.5
S4TVS18A	18	20	22.1	1	0.1	29.2	13.7
S4TVS20A	20	22.2	24.5	1	0.1	32.4	12.3
S4TVS22A	22	24.4	26.9	1	0.1	35.5	11.3
S4TVS24A	24	26.7	29.5	1	0.1	38.9	10.3
S4TVS26A	26	28.9	31.9	1	0.1	42.1	9.5
S4TVS28A	28	31.1	34.4	1	0.1	45.4	8.8
S4TVS30A	30	33.3	36.8	1	0.1	48.4	8.3
S4TVS33A	33	36.7	40.6	1	0.1	53.3	7.5
S4TVS36A	36	40	44.2	1	0.1	58.1	6.9
S4TVS40A	40	44.4	49.1	1	0.1	64.5	6.2
S4TVS43A	43	47.8	52.8	1	0.1	69.4	5.8
S4TVS45A	45	50	55.3	1	0.1	72.7	5.5
S4TVS48A	48	53.3	58.9	1	0.1	77.4	5.2
S4TVS51A	51	56.7	62.7	1	0.1	82.4	4.9
S4TVS54A	54	60	66.3	1	0.1	87.1	4.6
S4TVS58A	58	64.4	71.2	1	0.1	93.6	4.3
S4TVS60A	60	66.7	73.7	1	0.1	96.8	4.1
S4TVS64A	64	71.1	78.6	1	0.1	103	3.9

Package Outline Dimensions (in millimeters)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
B	1.25	1.45	0.049	0.057
C	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
E	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205



Soldering footprint

