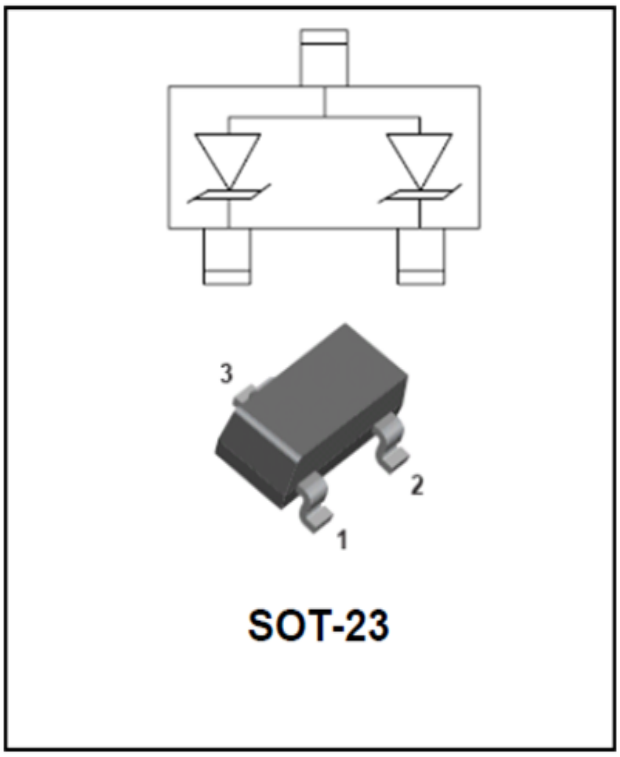
2-Line Uni-directional TVS Diode Array

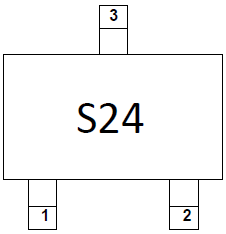


Features

- ●300W peak pulse power (8/20μs)
- ●Protects two uni-directional lines
- ●Ultra low leakage: nA level
- ●Operating voltage: 24V
- ●Low clamping voltage
- ●RoHS Compliant

Mechanical Characteristics

- ●Package: SOT-23
- ●Lead Finish: Matte Tin
- ●Case Material: “Green” Molding Compound.
- ●Moisture Sensitivity: Level 1 per J-STD-020
- ●Marking Information: See Below



■**Absolute Maximum Ratings** (Ta=25°C unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNIT
Operating Temperature Range	T_J	-55 to +125	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃
ESD per IEC 61000−4−2 (Air)	V_{ESD}	±30	KV
ESD per IEC 61000−4−2 (Contact)		±30	KV
Peak Pulse Power(8/20μs)	P_{Pk}	270	W
Peak Pulse Current(8/20μs)	I_{PP}	6	A

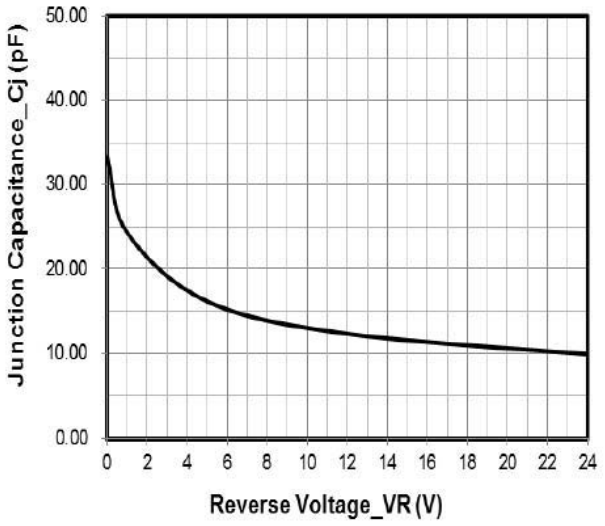
■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse Working Voltage	V_{RWM}	V				25.2
Reverse Leakage Current	I_R	uA	VRWM=25.2V			0.2
Breakdown Voltage	$V_{(BR)}$	V	I_T=1mA	27		
Forward Voltage	V_F	V	I_F=10mA		0.8	1.2
Clamping Voltage	V_C	V	I_{PP}=1A (8 x 20μs pulse)			32
Clamping Voltage	V_C	V	I_{PP}=6A(8 x 20μs pulse)			45
Junction Capacitance	C_J	pF	V_R=0V,f=1MHz Pin 1 to Pin 3 or Pin 2 to Pin 3			40
Junction Capacitance	C_J	pF	V_R=0V,f=1MHz Pin 1 to Pin 2			20

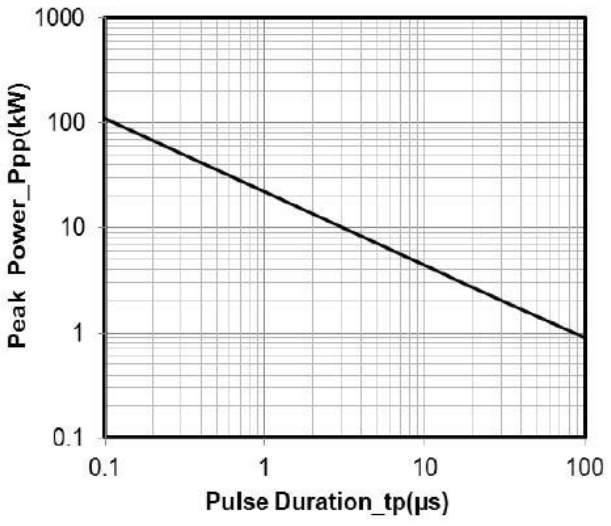
■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	ASM24
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	357
	$R_{\theta J-C}$	℃/W	143

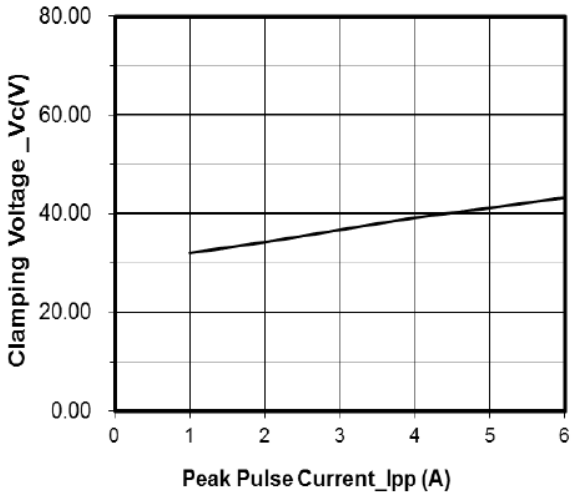
■ Characteristics (Typical)



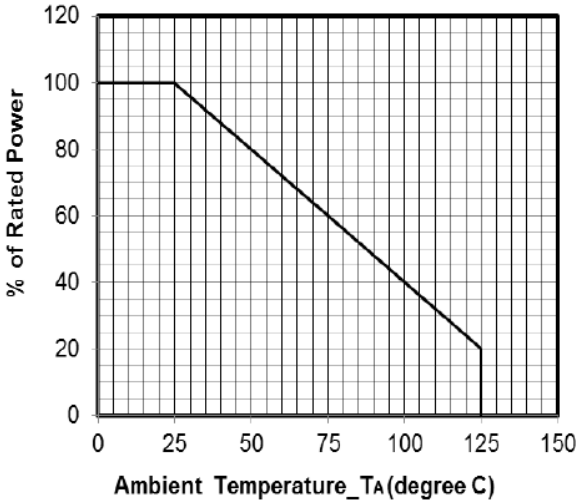
Junction Capacitance vs. Reverse Voltage



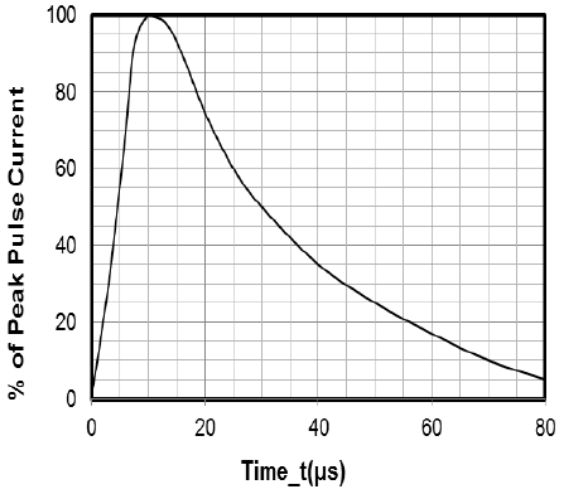
Peak Pulse Power vs. Pulse Time



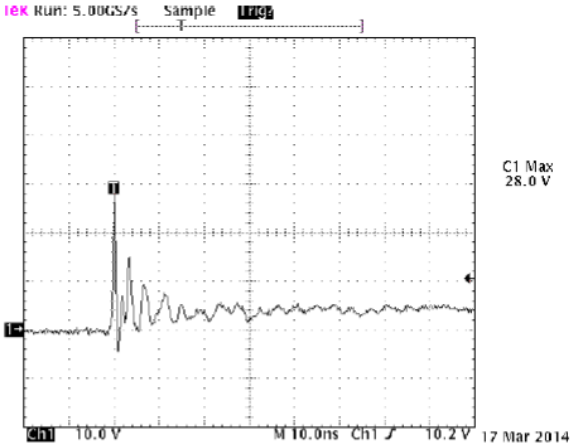
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



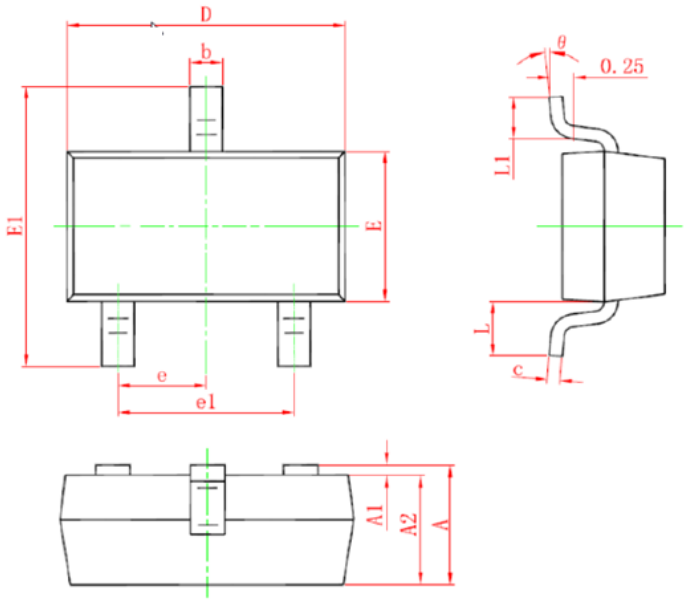
8 X 20μs Pulse Waveform



Note：Data is taken with a 10x attenuator

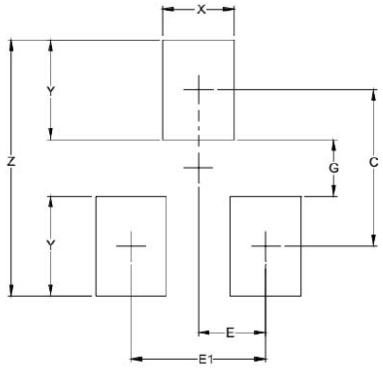
ESD Clamping Voltage
8 kV Contact per IEC61000-4-2

■ Outline Dimensions



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.90	--	1.15	0.035	--	0.045
A1	0.00	--	0.10	0.000	--	0.004
A2	0.90	--	1.05	0.035	--	0.041
b	0.30	--	0.50	0.012	--	0.020
c	0.08	--	0.15	0.003	--	0.006
D	2.80	--	3.00	0.110	--	0.118
E	1.20	--	1.40	0.047	--	0.055
E1	2.25	--	2.55	0.089	--	0.100
e	0.95TYP			0.037TYP		
e1	1.80	--	2.00	0.071	--	0.079
L	0.55REF			0.022REF		
L1	0.30	--	0.50	0.012	--	0.020
θ	0°	--	8°	0°	--	8°

■ Soldering Footprint



SYM	DIMENSIONS	
	INCHES	MILLIMETERS
C	.087	2.20
E	.037	0.95
E1	.075	1.90
G	.031	0.80
X	.039	1.00
Y	.055	1.40
Z	.141	3.60

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