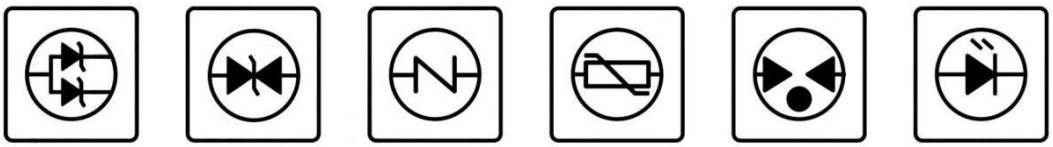
MSKSEMI 美森科
SEMICONDUCTOR



ESDA6V1SC6-MS

Product specification

Features

- Protects up to 5 lines
- Low leakage: nA level
- Low clamping voltage
- Excellent surge protection (80W at 8/20μs)
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test

  Air discharge: ±20kV

  Contact discharge: ±20kV
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 18A (8/20ps)
- RoHS Compliant

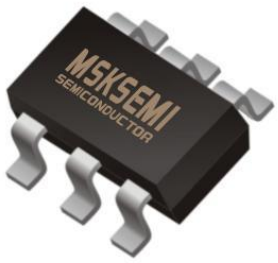
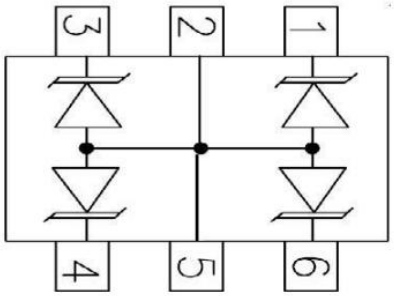
Applications

- Audio Players
- Peripherals
- Portable Instrumentation
- Desktops PC and Servers
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories
- Notebook, Laptop, and Palmtop Computers

Mechanical Characteristics

- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Reference News

PACKAGE OUTLINE	Pin Configuration	Marking
 SOT-23-6		

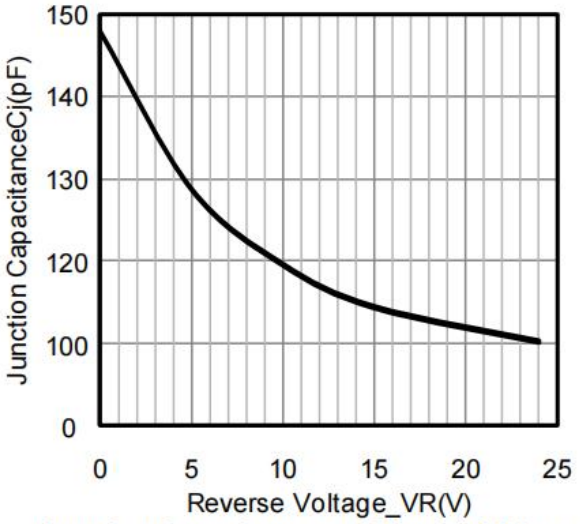
Absolute Maximum Ratings(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	350	W
ESD per IEC 61000−4−2 (Air)	V_{ESD}	±20	Kv
ESD per IEC 61000−4−2 (Contact)		±20	
Operating Temperature Range	T_J	-55 to +125	℃
Storage Temperature Range	T_{STJ}	-55 to +150	℃

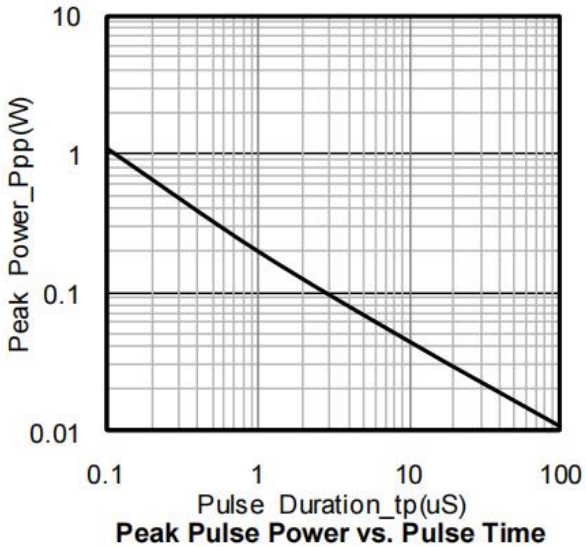
Electrical Characteristics(TA=25°C unless otherwise specified)

P/N	V_{RWM} (V)	V_{BR} (V)	I_T (mA)	V_C @1A	Vc		I_R μA (Max)	C (Pf) (Typ.)
					(Max)	(@A)		
ESDA6V1SC6-MS	5.5	6	1	15	20	18	1.0	150

TypicalCharacteristics@Ta=25℃unlessotherwisespecified

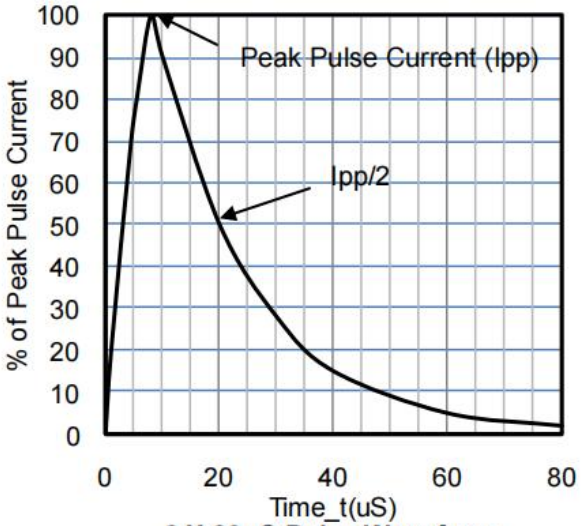


Junction Capacitance vs. Reverse Voltage



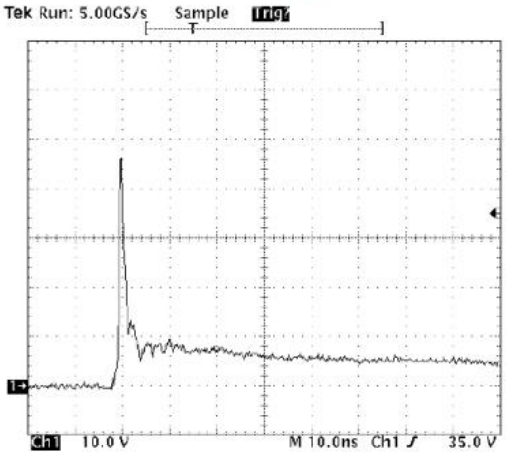
Peak Pulse Power vs. Pulse Time

Clamping Voltage vs. Peak Pulse Current (tp = 8/20us)



8 X 20uS Pulse Waveform

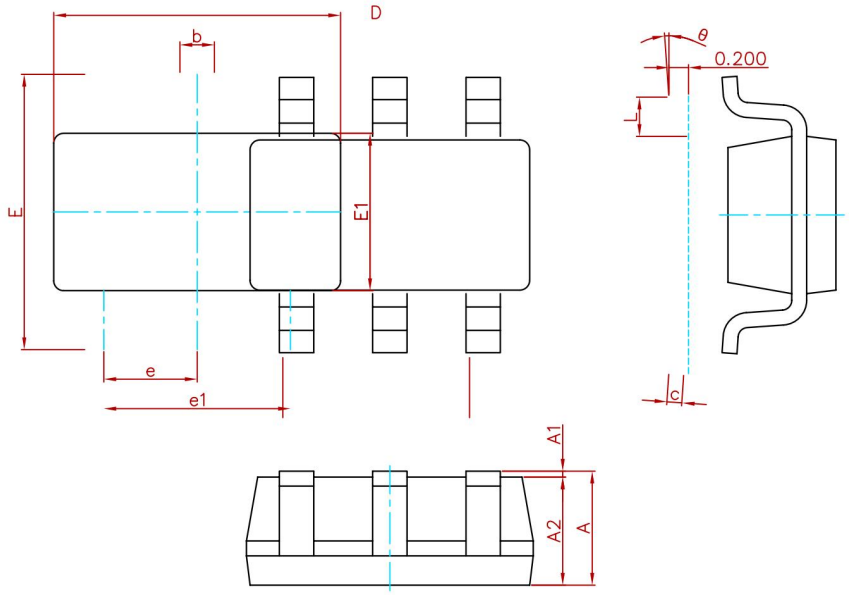
Power Derating Curve



ESD Clamping Voltage

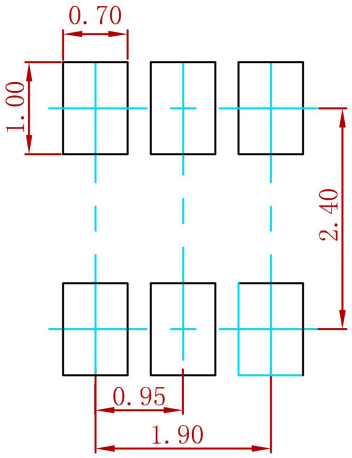
8 kV Contact per IEC61000-4-2

PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1.Controlling dimension:in millimeters.

2.General tolerance:±0.05mm.

3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
ESDA6V1SC6-MS	SOT-23-6	3000

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