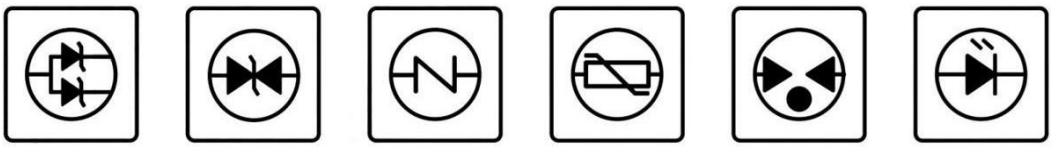
MSKSEMI 美森科
SEMICONDUCTOR



ESDA6V8AV6-MS

Product specification

ESDA6V8AV6-MS

Features

- 100W peak pulse power (t_P = 8/20μs)
- SOT-563 package
- Protects four bidirectional lines and five unidirectional lines
- Low clamping voltage
- Low capacitance
- Working voltage: 5V
- RoHS compliant transient protection for high speed data lines to IEC61000-4-2(ESD)±15kV(air),±8kV(contact)

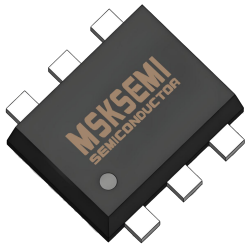
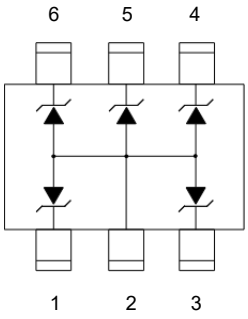
Mechanical Characteristics

- Lead finish:100% matteSn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260℃
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- Pin flatness:≤3mil

Applications

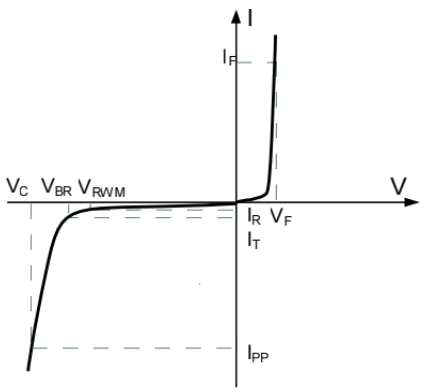
- Communication systems & cellular phones
- Printers
- Notebook and hand hold computers
- PDAs
- Video equipment

Reference News

SOT-563	PIN Configuration	Marking
		

Electronics Parameter

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
P_{PP}	Peak Pulse Power
C_J	Junction Capacitance
I_F	Forward Current
V_F	Forward Voltage @ I_F



lectrical characteristics per line@25℃(unless otherwise specified) *NOTE1

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	I_t = 1mA	5.6			V
Reverse Leakage Current	I_R	V_{RWM} = 5V T=25°C			1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_P = 8/20μS			8.8	V
Clamping Voltage	V_C	I_{PP}=4A t_P = 8/20μS			11.5	V
Junction Capacitance	C_j	V_R=0V f = 1MHz		1		pF

Absolute maximum rating@25℃ *NOTE1

Rating	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{pp}	100	W
Forward Voltage(@1A, 8/20μs)	V_F	1.5	V
Operating Temperature	T_J	-55 to +150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Note1: Pin 1, 3, 4, 5 or 6 to Pin 2

Typical Characteristics

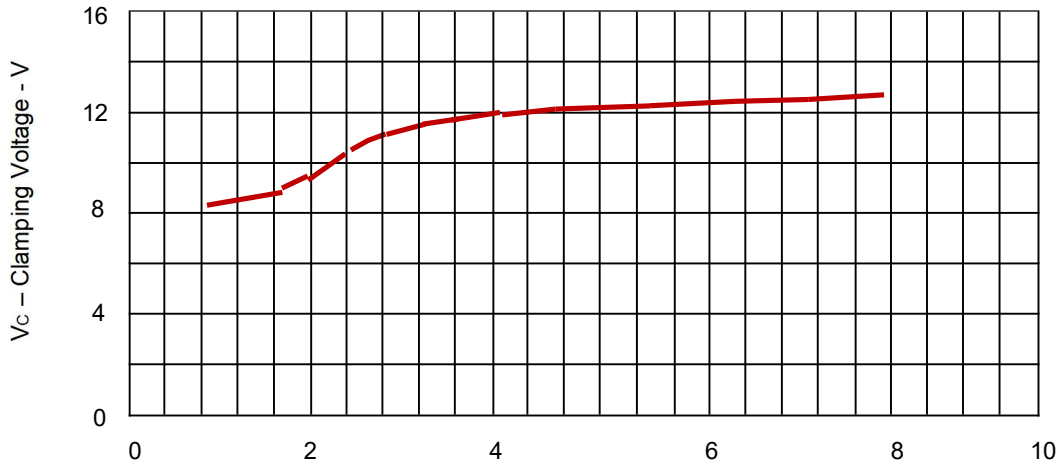


Fig.1 Typical Clamping Voltage VS Peak Pulse Current for ESDA6V8AV6-MS

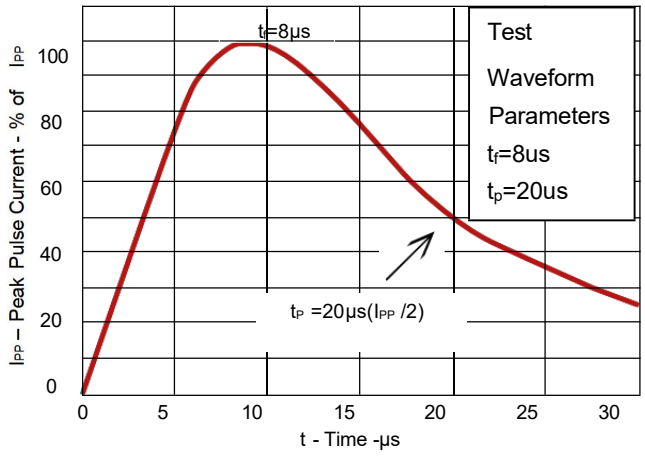


Fig 2.Pulse Waveform

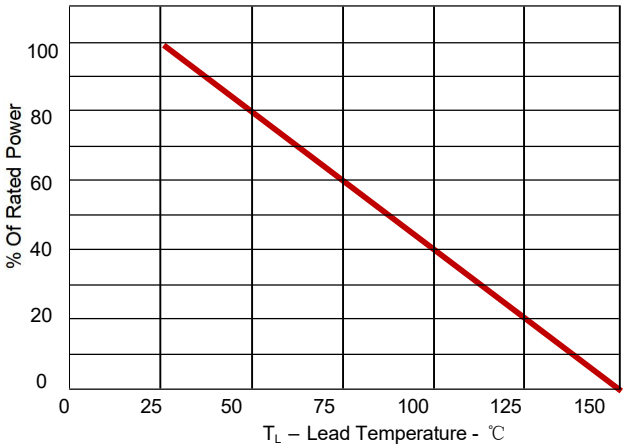
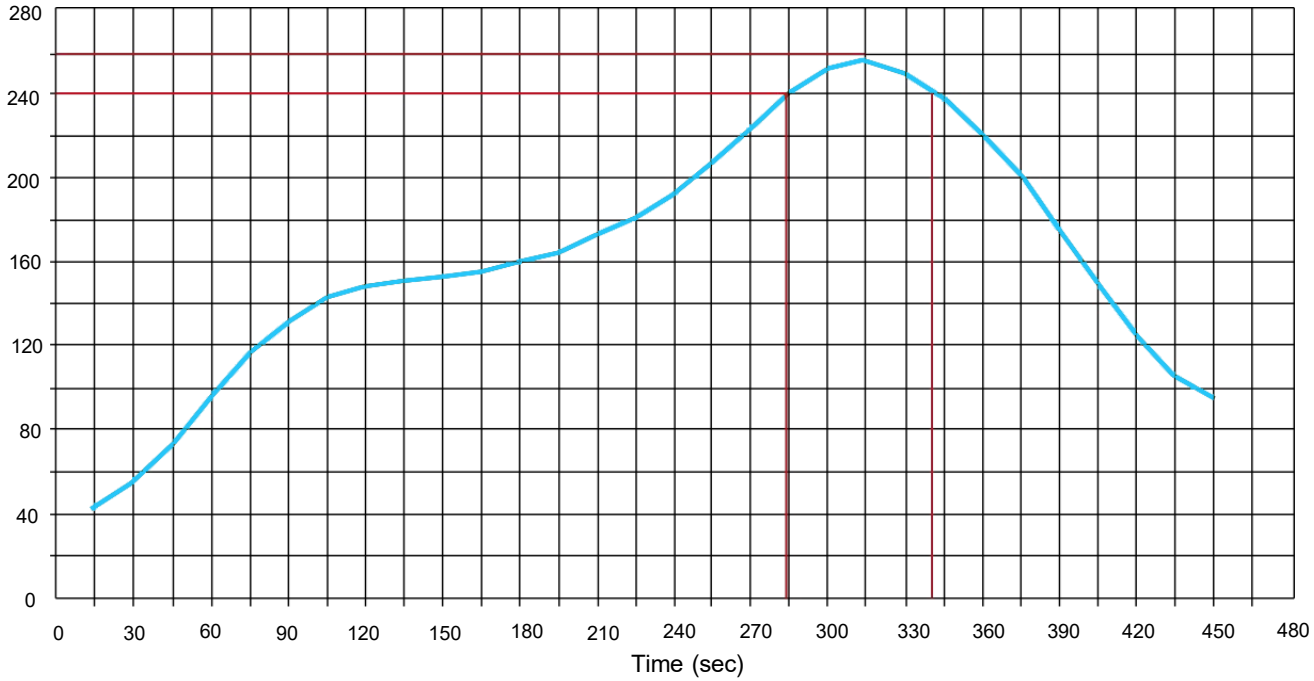


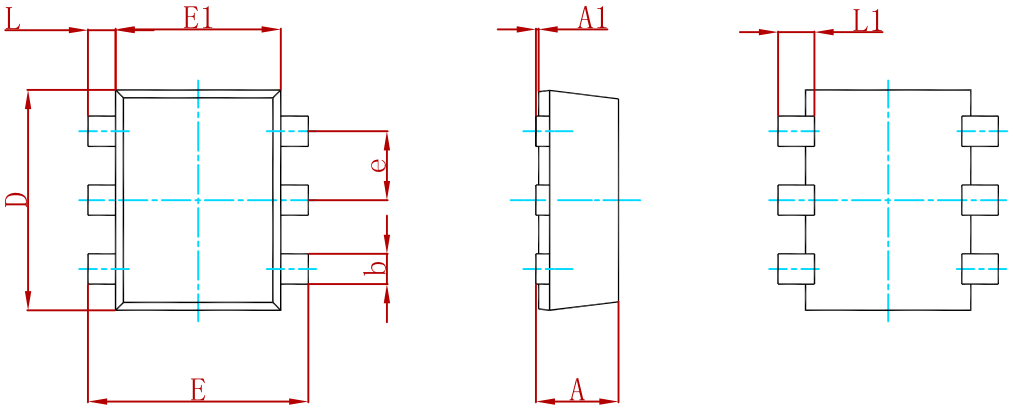
Fig 3.Power Derating Curve

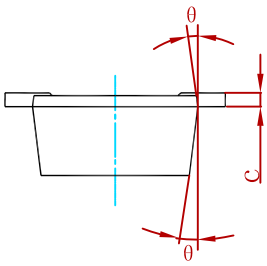
Solder Reflow Recommendation

Peak Temp=257℃, Ramp Rate=0.802deg. ℃/sec



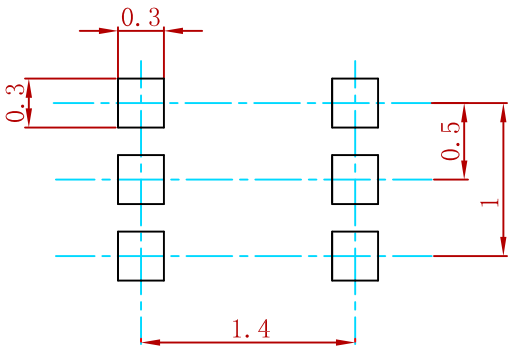
PACKAGEMECHANICALDATA





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.006
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
θ	7 °REF.		7 °REF.	

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

Order information

Orderable Device	Package	Packing Option
ESDA6V8AV6-MS	SOT-563	3000PCS

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