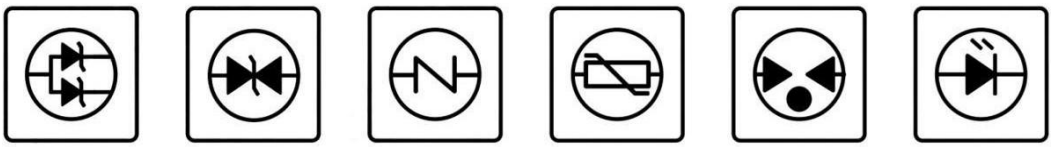
MSKSEMI 美森科
SEMICONDUCTOR



MSKSLVU2.8-4

Product specification

MSKSLVU2.8-4

Features

- 500W peak pulse power (t_P = 8/20μs)
- SOP-8 package
- Working voltage: 2.8V
- Low clamping voltage
- Low capacitance
- RoHS compliant transient protection for high speed data lines to IEC61000-4-2(ESD), ±30kV(air),±30kV(contact)

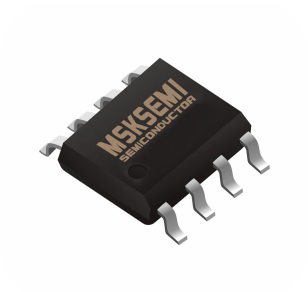
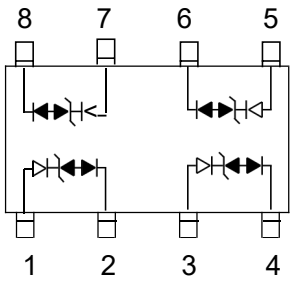
Mechanical Characteristics

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

Applications

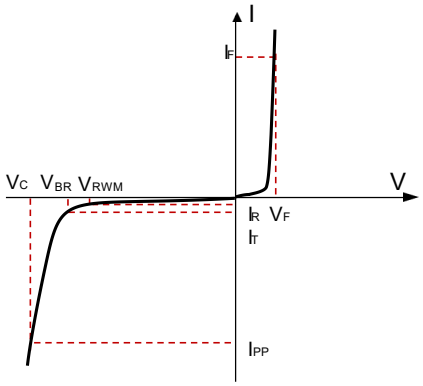
- Video/Audio input
- WAN/LAN equipment
- Personal digital assistant (PDA)
- Ethernet - 10/100/1000 base T

Reference News

SOP-8	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



Electrical characteristics per line@25℃(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Peak Reverse Working Voltage	V_{RWM}				2.8	V
Breakdown Voltage	V_{BR}	I_t = 1mA	3.0	3.4		V
Reverse Leakage Current	I_R	V_{RWM} =2.8V			1	μA
Clamping Voltage	V_C	I_{PP} = 1A, t_P = 8/20μs			5.0	V
Clamping Voltage	V_C	I_{PP}=5A, t_P = 8/20μs			7.5	V
Clamping Voltage	V_C	I_{PP}=24A, t_P = 8/20μs			12.0	V
Junction Capacitance	C_J	V_R=0V, f = 1MHz		3.5		pF

Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{pp}	500	W
Operating Temperature	T_J	-55 to +150	℃
Storage Temperature	T_{STG}	-55 to +150	℃

Typical Characteristics

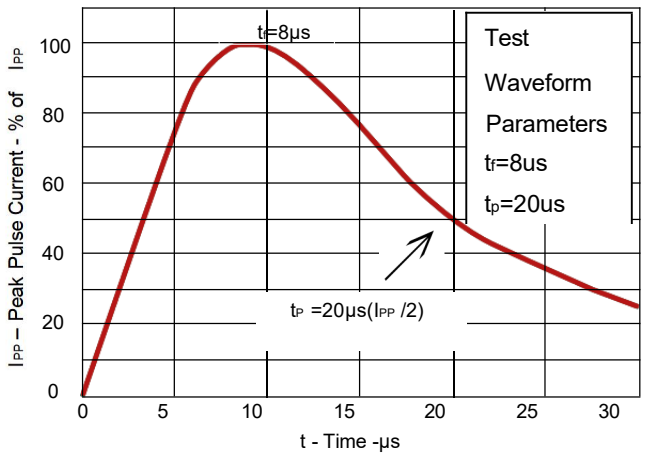


Fig 1.Pulse Waveform

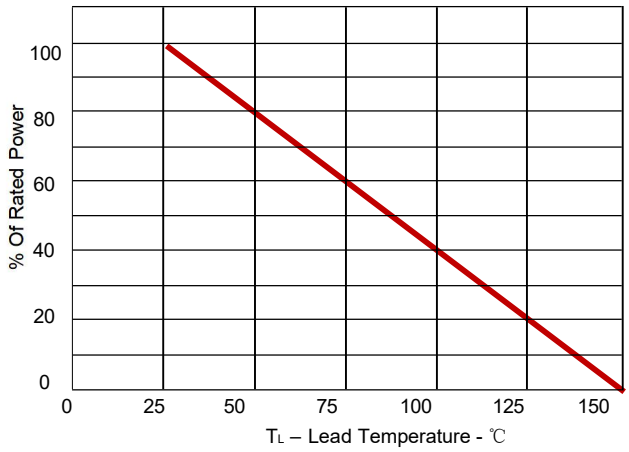
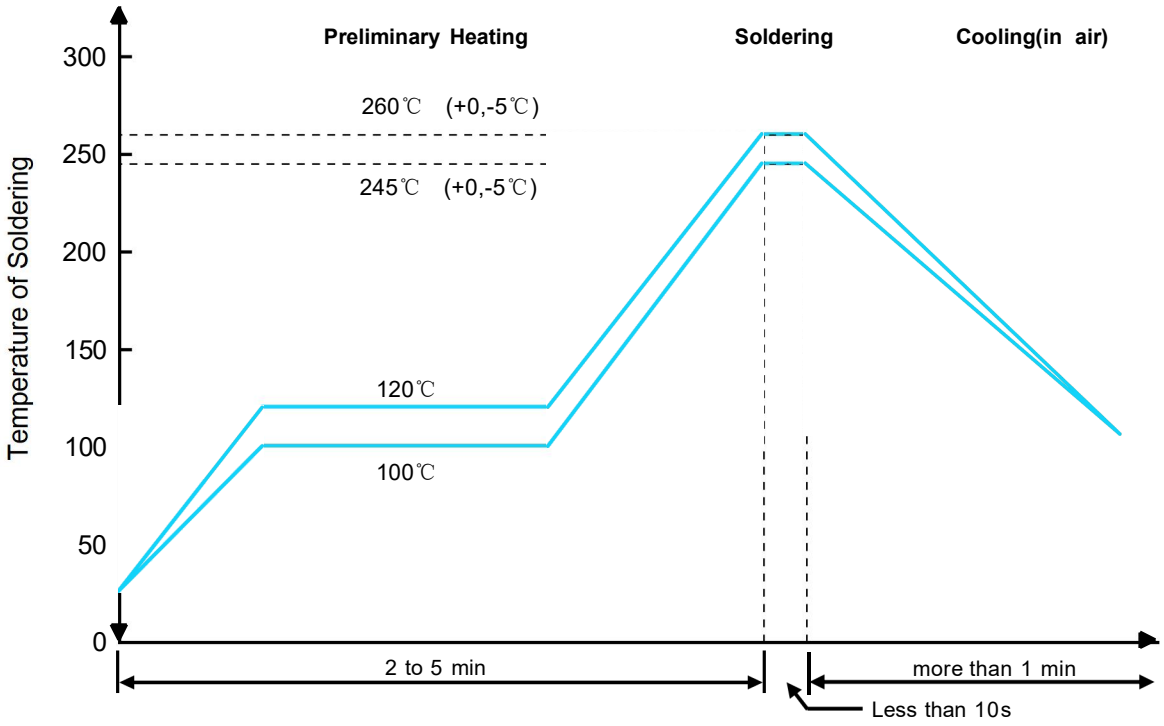


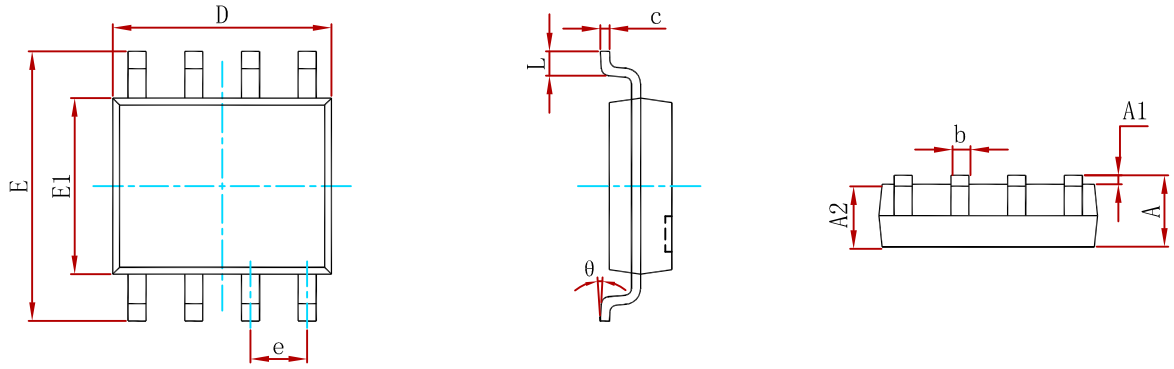
Fig 2.Power Derating Curve

Solder Reflow Recommendation



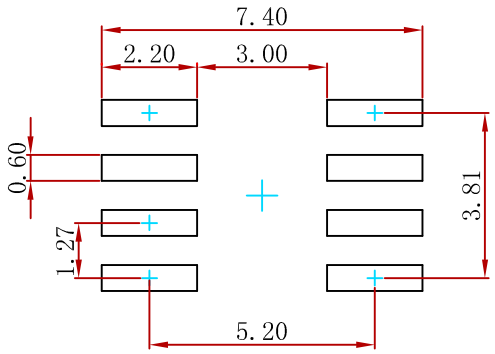
Remark: Pb free for 260℃; Pb for 245℃.

PACKAGEMECHANICALDATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	**Max**	**Min**	**Max**
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.007	0.010
D	4.800	5.000	0.189	0.197
e	1.270 (BSC)		0.050 (BSC)	
E	5.800	6.200	0.228	0.244
E1	3.800	4.000	0.150	0.157
L	0.400	1.270	0.016	0.050
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.

Order information

Orderable Device	Package	Packing Option
MSKSLVU2.8-4	SOP-8	2500PCS

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