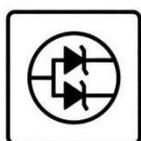


MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

AZ2225-01L-MS

Product specification

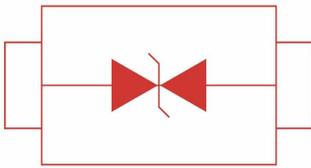
Features

- 100Watts peak pulse power (tp = 8/20μs)
- Transient protection for high speed data lines to IEC 61000-4-2 (ESD) ±30kV (air), ±30kV(contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
- Working voltages :5V
- Protects one bidirectional line
- Low operating and clamping voltages
- Solid-state silicon avalanche technology

Applications

- Notebooks, Desktops, Servers and Video Graphics Cards
- USB Power & Data Line Protection
- Monitors and Flat Panel Displays
- I²C Bus Protection
- Portable Instrumentation
- Set Top Box

Reference News

PACKAGE OUTLINE	Pin Configuration	Marking
		
SOD-323		

Maximum Rating @ Ta=25°C unless otherwise specified

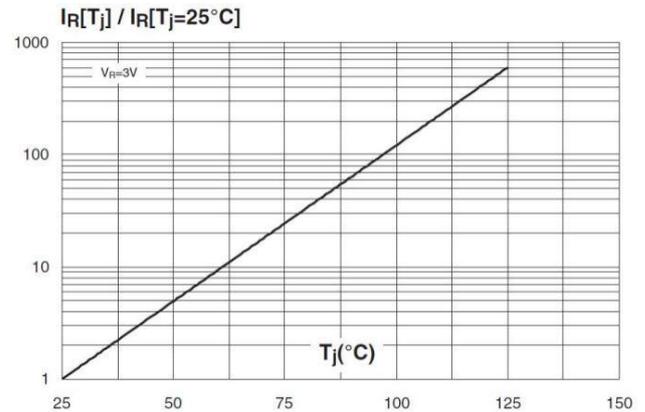
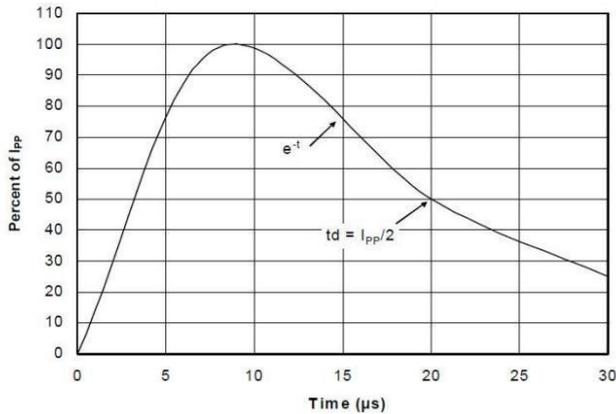
Symbol	Parameter	Ratings	Units
P _K	Peak Pulse Power (tp = 8/20μs)	100	Watts
L	Lead Soldering Temperature	260(10sec.)	°C
T _J	Operating Temperature	-55 to + 125	°C
T _{STG}	Storage Temperature	-55 to + 150	°C

Electrical Characteristics@ Ta=25°C unless otherwise

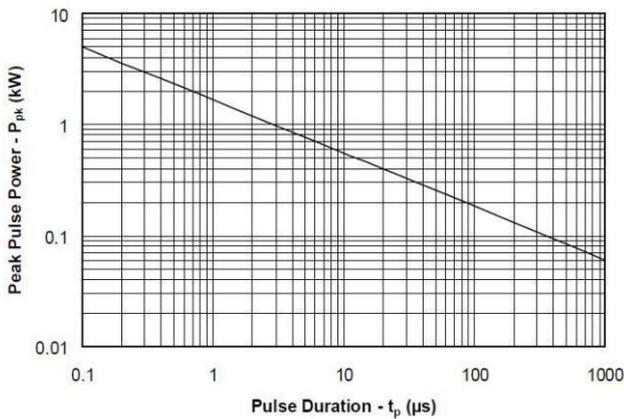
P/N	VRWM @ IR		VBR@ ImA	Vc@ 1A	Vc@ IPP		CJ
	V	μA	V	V	V	A	pF
		MAX	MIN	MAX	MAX		MAX
AZ2225-01L-MS	5	1	6.1	11.8	9	10	15

Typical Characteristics@ Ta=25°C unless otherwise specified

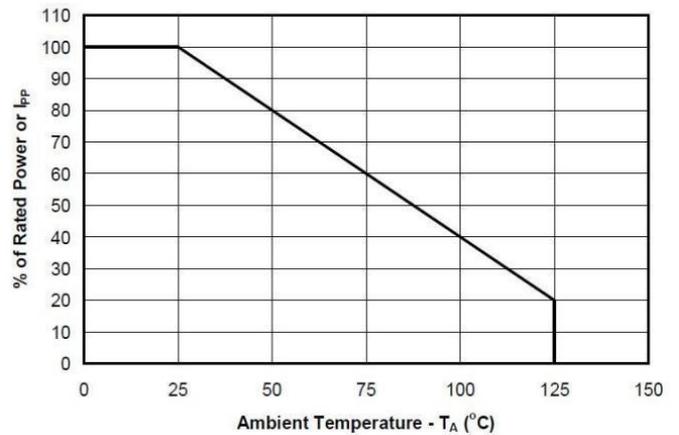
Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

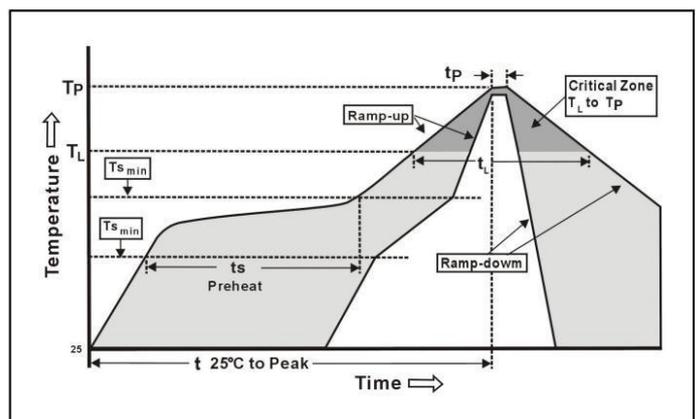


Power Derating Curve

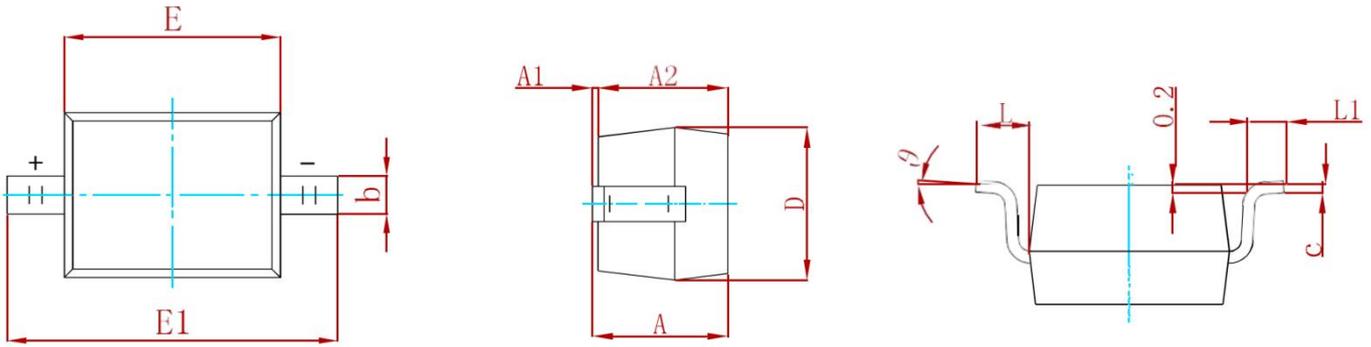


SolderingParameters

Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(Min)}$)	150°C
	- Temperature Max ($T_{s(Max)}$)	200°C
	- Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{s(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_r)	60 – 150 seconds
Peak Temperature (T_p)		250 ^{+0/-5} °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second Max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C

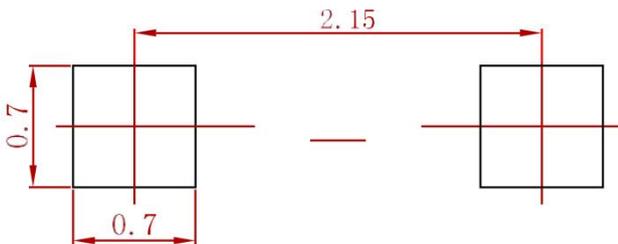


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min.	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
C	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
AZ2225-01L-MS	SOD-323	3000

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