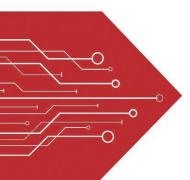
# MSKSEMI















**ESD** 

**TVS** 

**TSS** 

MOV

**GDT** 

**PLED** 

Product data sheet

www.msksemi.com



#### **Features**

100Watts peak pulse power (tp =  $8/20\mu$ s)

Transient protection for high speed data lines to

IEC 61000-4-2 (ESD) ±30kV (air), ±30kV(contact)

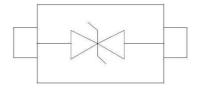
IEC 61000-4-4 (EFT) 40A (5/50ns)

Working voltages :5V

Protects one bidirectional line

Low operating and clamping voltages

Solid-state silicon avalanche technology





SOD323

## **Applications**

Set Top Box

Notebooks, Desktops, Servers and Video Graphics Cards USB Power & Data Line Protection Monitors and Flat Panel Displays I<sup>2</sup>C Bus Protection Portable Instrumentation

## Maximum Rating @ Ta=25°C unless otherwise specified

Symbol	Parameter	Ratings	Units
P <sub>PK</sub>	Peak Pulse Power (tp = 8/20μs)	100	Watts
TL	Lead Soldering Temperature	260(10sec.)	${\mathbb C}$
TJ	Operating Temperature	-55 to +125	$^{\circ}$
T <sub>STG</sub>	Storage Temperature	-55 to +150	${\mathbb C}$

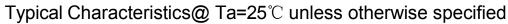
## Electrical Characteristics@ Ta=25°C unless otherwise

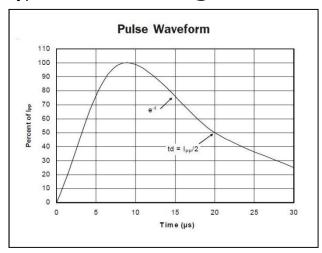
	Vrwm@Ir		VBR@ImA	Vc@1A	Vc@IPP		CJ
P/N	V	μΑ	V	V	V	Α	pF
		MAX	MIN	MAX	MAX		MAX
AZ2225-01L-MS	5	1	6.1	11.8	9	10	15

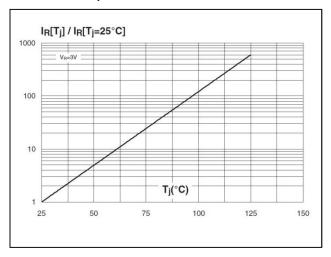


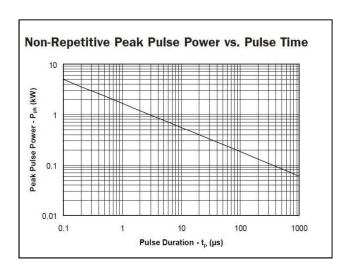


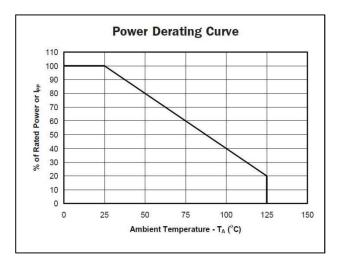






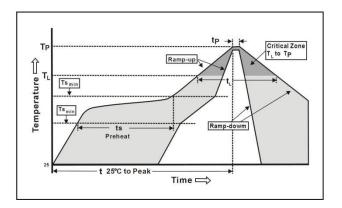






## **Soldering Parameters**

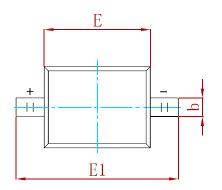
Reflow Condition		Fb – Free assembly	
	-Temperature Min (T <sub>s(Min)</sub> )	150°C	
Pre Heat	- Temperature Max (T <sub>s(Max)</sub> )	200°C	
	-Time (Min to max) (t <sub>s</sub> )	60 – 180 secs	
Average ramp up rate (Liquidus) Temp (T <sub>L</sub> ) to peak		3°C/second Max	
T <sub>s (Max)</sub> to T	- Ramp-up Rate	3°C/second Max	
	-Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
Reflow	-Temperature (t <sub>L</sub> )	60 – 150 seconds	
Peak Temperature (T <sub>P</sub> )		250*0/-5 °C	
Time within 5°C of actual peak Temperature (t <sub>p</sub> )		20 – 40 seconds	
Ramp-dowm Rate		6°C/second Max	
Time 25°C to peak Temperature (T <sub>p</sub> )		8 minutes Max.	
Do not exceed		260°C	

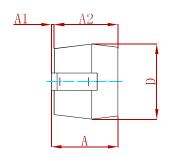


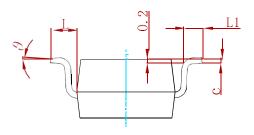




#### **PACKAGE MECHANICAL DATA**

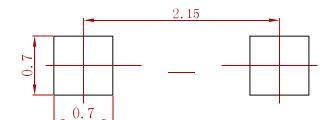






O	Dimensions In Millimeters		Dimensions In Inches	
Symbol	Min.	Max.	Min.	Max.
Α		1.000		0.039
A 1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
С	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475	REF.	0.019	REF.
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:± 0.05mm.
- 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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