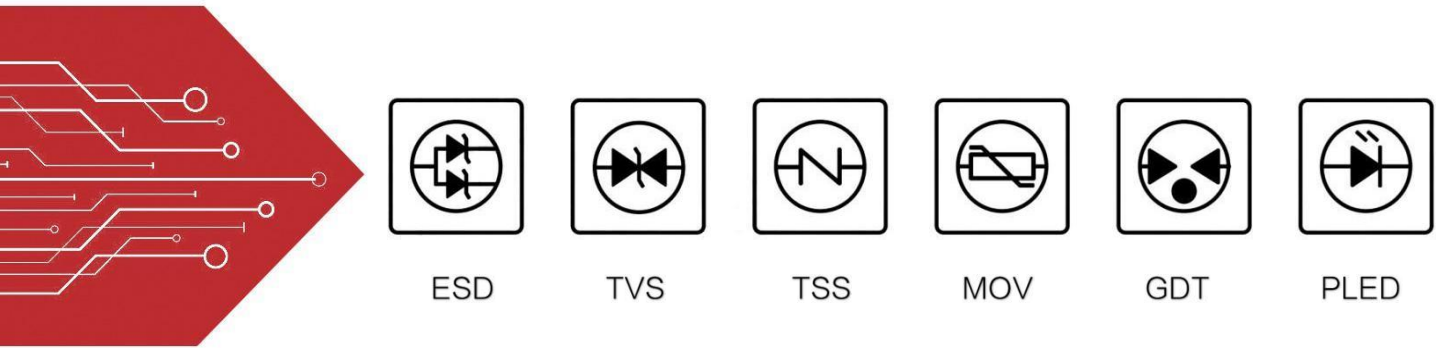
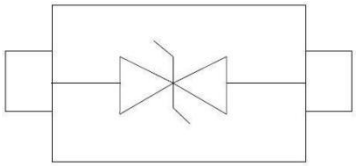
MSKSEMI
SEMICONDUCTOR

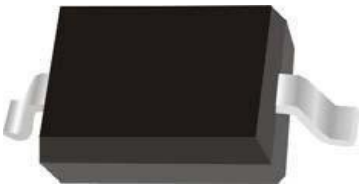


Product data sheet

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





SOD323

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

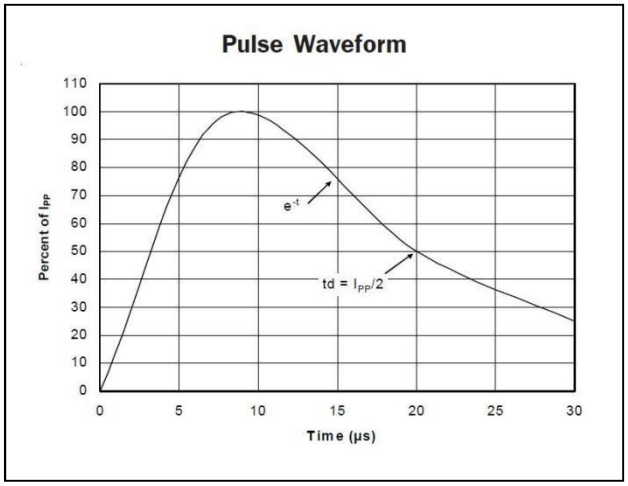
Maximum Rating @ Ta=25℃ unless otherwise specified

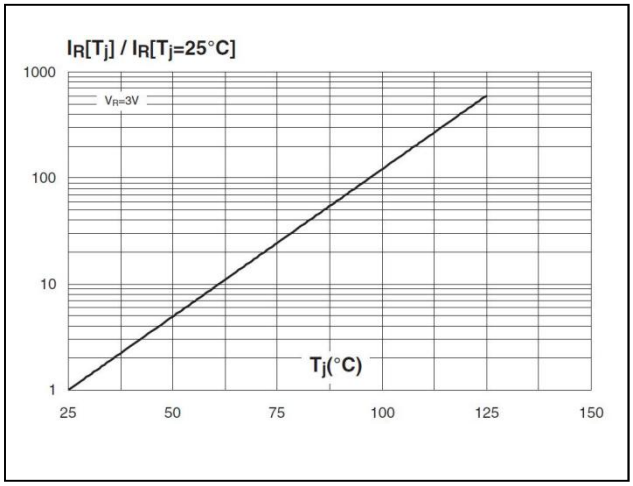
Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power (tp = 8/20μs)	100	Watts
T_L	Lead Soldering Temperature	260(10sec.)	℃
T_J	Operating Temperature	-55 to +125	℃
T_{STG}	Storage Temperature	-55 to +150	℃

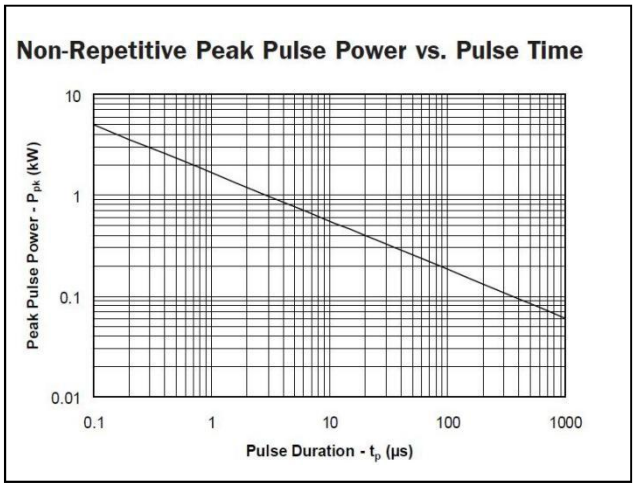
Electrical Characteristics@ Ta=25℃ unless otherwise

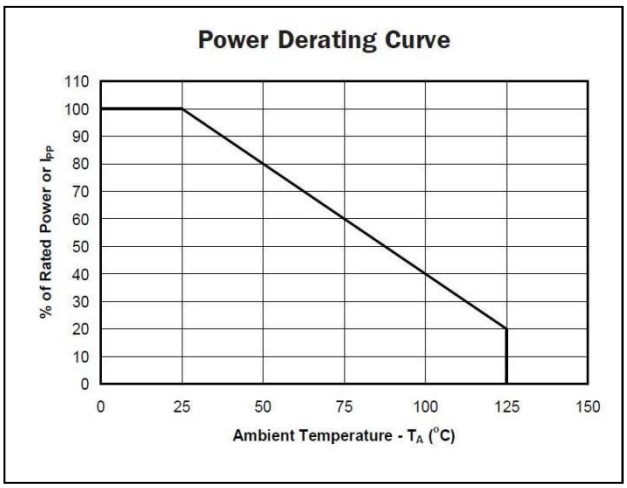
P/N	V_{RWM} @I_R		V_{BR}@ImA	V_C@1A	V_C@I_{PP}		C_J
	V	**μA**	V	V	V	A	pF
		MAX	MIN	MAX	MAX		MAX
AZ2225-01L-MS	5	1	6.1	11.8	9	10	15

Typical Characteristics@ Ta=25℃ unless otherwise specified



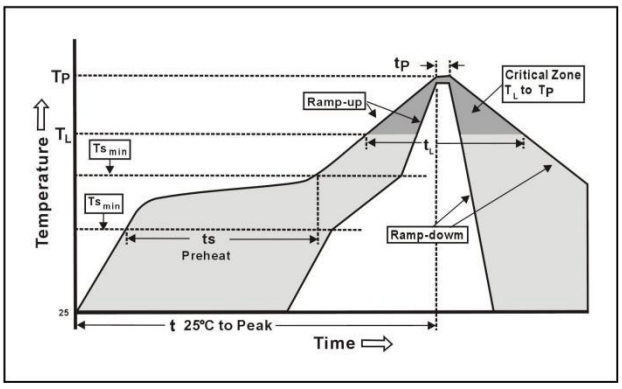




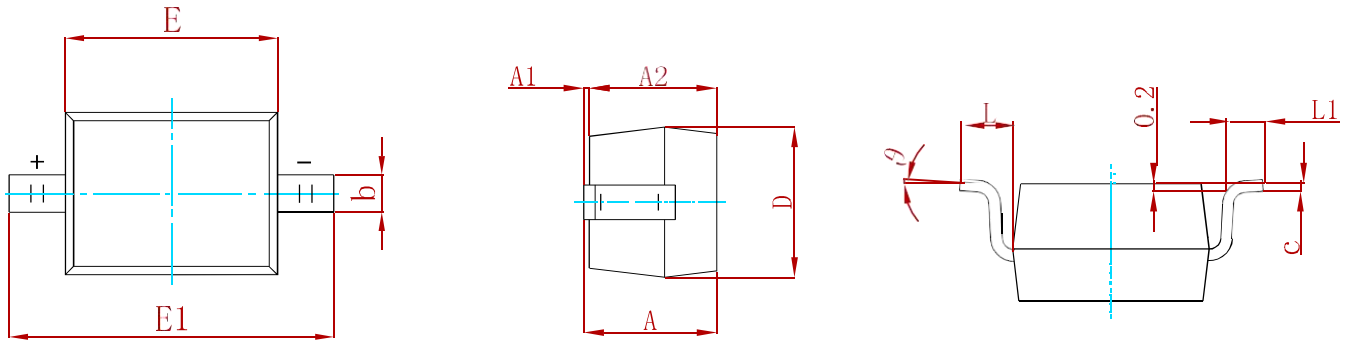


Soldering Parameters

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_L)	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-dowm Rate		6°C/second Max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C

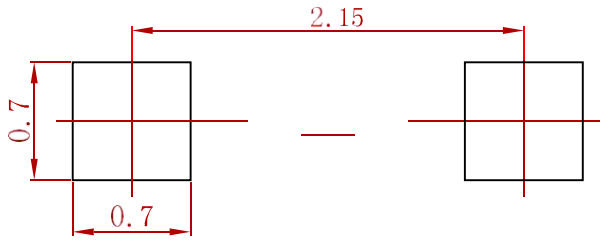


PACKAGE MECHANICAL DATA



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:± 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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