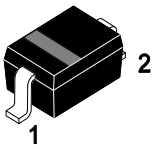
S-LESD3Z36CT1G

ESD Protection Diodes



SOD323(SC-76)

1. FEATURES

- Ultra low leakage: nA level.
- Low clamping voltage.
- ESD protection
- Complies with IEC 61000-4-2 standards:Air discharge:± 30kV
  Contact discharge:± 30kV
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S-Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

2. DEVICE MARKING AND ORDERING INFORMATION

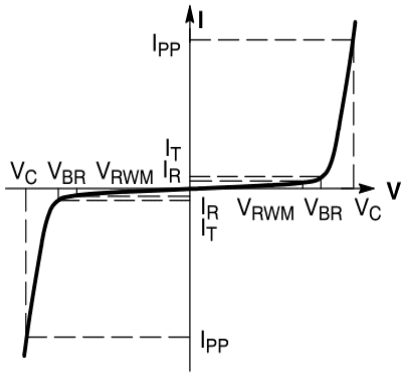
Device	Marking	Shipping
S-LESD3Z36CT1G	ZC	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter		Symbol	Limits	Unit
IEC 61000−4−2 (ESD)	Contact Air		± 30 ± 30	kV
peak pulse power@8/20 μs(Note 1)		PPP	350	W
peak pulse current @8/20 μs(Note 1)		IPP	5	A
Storage Temperature Range		Tstg	−55～+150	ºC
Operating Temperature Range		TJ	−55～+150	ºC

4. ELECTRICAL CHARACTERISTICS (Ta= 25ºC)

Symbol	Parameter
IPP	Maximum Reverse Peak Pulse Current
VC	Clamping Voltage @ IPP
VRWM	Working Peak Reverse Voltage
IR	Maximum Reverse Leakage Current @ VRWM
VBR	Breakdown Voltage @ IT
IT	Test Current
Ppk	Peak Power Dissipation
C	Capacitance @ VR = 0 and f = 1.0 MHz



5. ELECTRICAL CHARACTERISTICS (Ta= 25ºC)

Characteristic	Symbol	Min.	Typ.	Max	Unit
reverse stand-off voltage	VRWM	-	-	36	V
reverse leakage current (VRWM = 36 V)	IRM	-	-	1	μA
breakdown voltage (IT = 1 mA)	VBR	38	-	45	V
Clamping Voltage(Note 1) (IPP = 1A (8 x 20μs pulse)) (IPP = 4A (8 x 20μs pulse))	VC	- -	- -	50 60	V
Junction Capacitance (VR = 0V, f = 1MHz)	CJ	-	-	30	pF

Note 1.Surge current waveform per Figure 2 according to IEC 61000-4-5.

6. ELECTRICAL CHARACTERISTICS CURVES

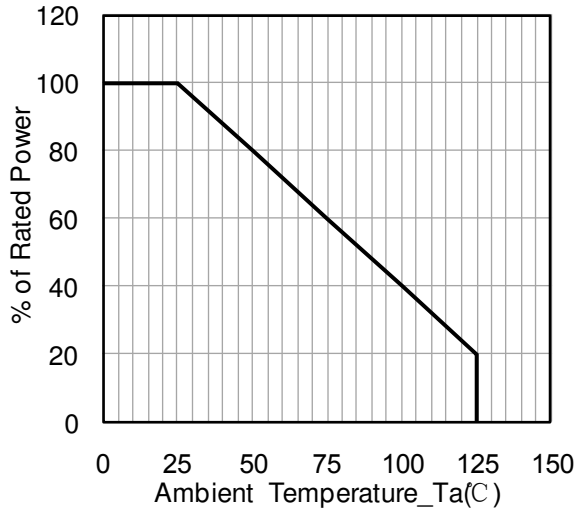


Figure 1. Power Derating Curve

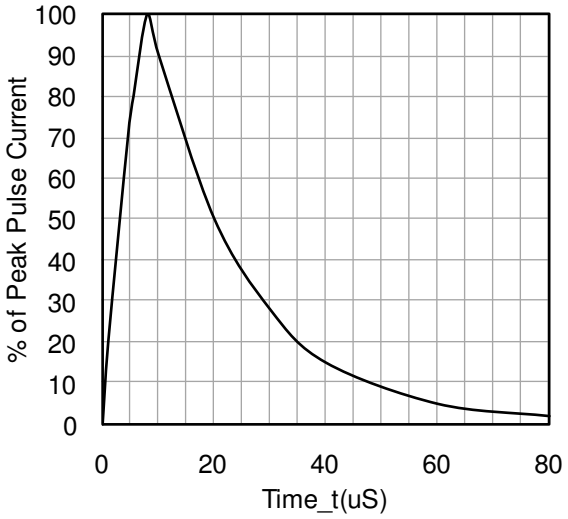


Figure 2. 8 X 20uS Pulse Waveform according to IEC 61000-4-5.

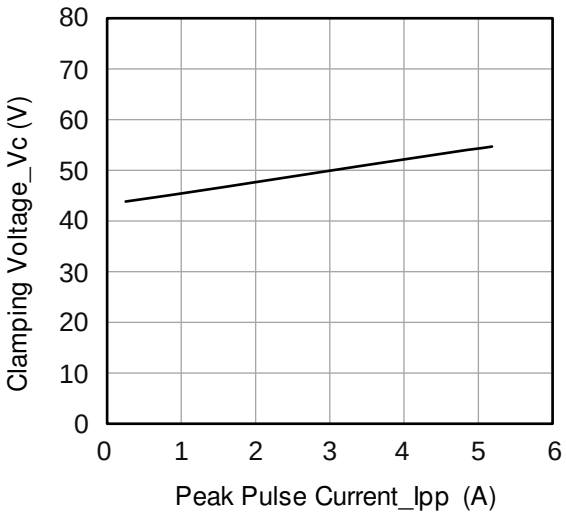


Figure 3.Clamping Voltage vs.Peak Pulse Current according to IEC 61000-4-5.

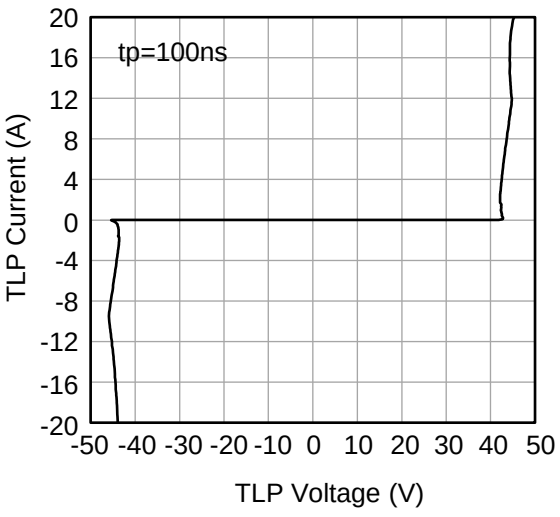
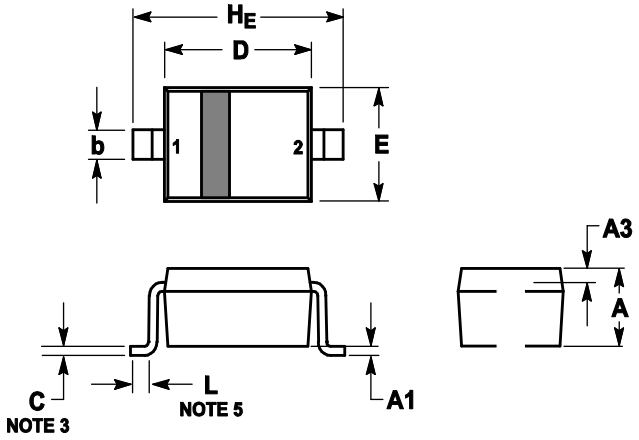


Figure 4. TLP Measurement

7.OUTLINE AND DIMENSIONS

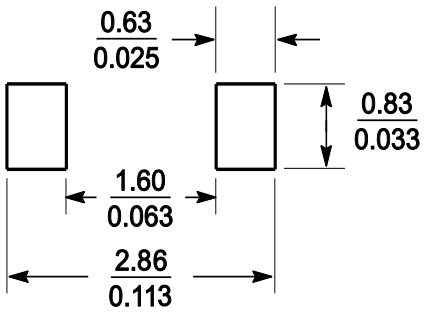


Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.8	0.9	1	0.031	0.035	0.04
A1	0	0.05	0.1	0	0.002	0.004
A3	0.15REF			0.006REF		
b	0.25	0.32	0.4	0.01	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.6	1.7	1.8	0.062	0.066	0.07
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
H_E	2.3	2.5	2.7	0.09	0.098	0.105

8.SOLDERING FOOTPRINT



DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.

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