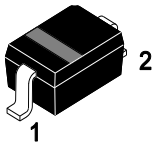
S-LM3Z4V7T1G

Zener Voltage Regulators
200 mW SOD-323 Surface Mount



SOD323(SC-76)

1. FEATURES

- 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.
- Steady state power rating of 200 mW
- ESD rating of class 3 per human body model

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
S-LM3Z4V7T1G	09	3000/Tape&Reel
S-LM3Z4V7T3G	09	13000/Tape&Reel

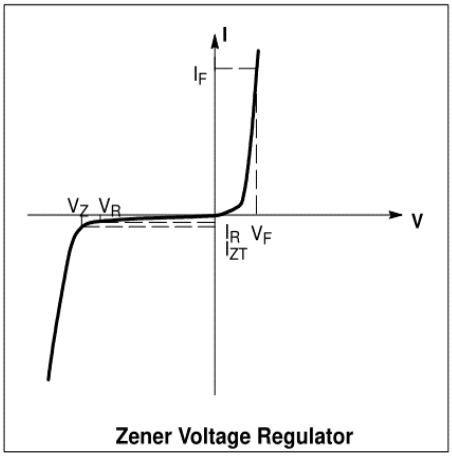
3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−4 Board (Note 1) @ TA = 25ºC	PD	200	mW
Thermal Resistance, Junction–to–Ambient Junction–to–Case	 RΘJA RΘJC	 400 175	 ºC/W
Junction temperature	Tj	−65～+150	ºC
Storage temperature	Tstg	−65～+150	ºC

1.Device mounted on an FR-4 PCB, single-sided copper, tin-plated and standard footprint.

4. ELECTRICAL CHARACTERISTICS (Ta= 25 ºC)

Symbol	Parameter
VZ	Reverse Zener Voltage @ IZT
IZT	Reverse Current
ZZT	Maximum Zener Impedance @ IZT
IZK	Reverse Current
ZZK	Maximum Zener Impedance @ IZK
IR	Reverse Leakage Current @ VR
VR	Reverse Voltage
IF	Forward Current
VF	Forward Voltage @ IF
θVZ	Maximum Temperature Coefficient of VZ
C	Max. Capacitance @VR = 0 and f = 1 MHz



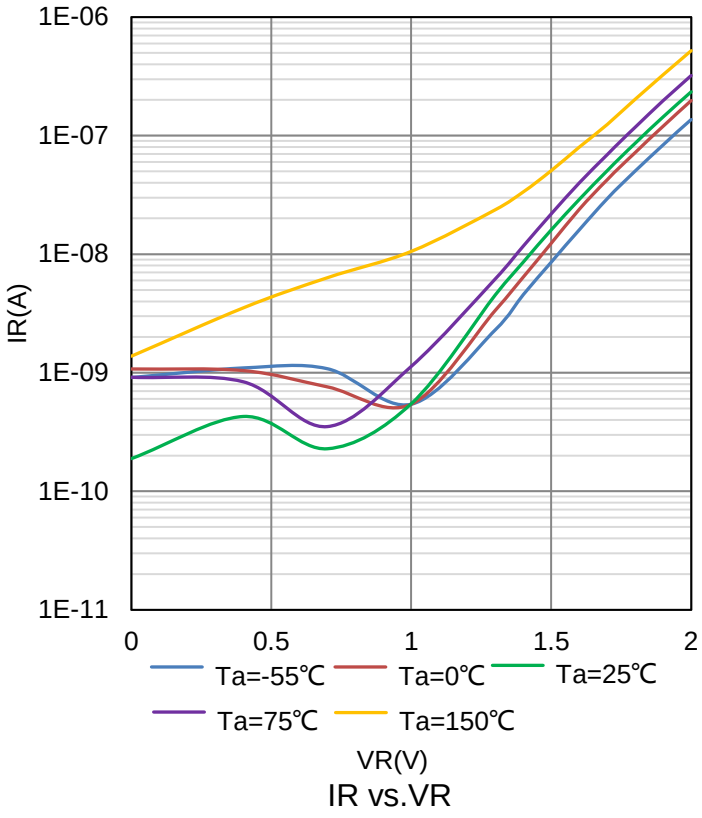
Zener Voltage Regulator

5. ELECTRICAL CHARACTERISTICS (Ta= 25ºC)

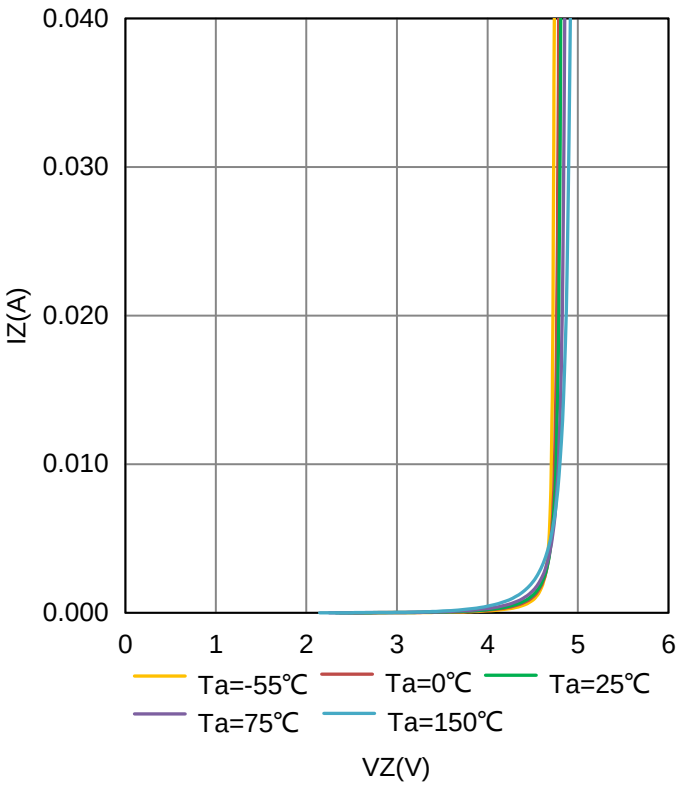
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage (IF = 10mA)	VF	-	-	0.9	V
Zener voltage (IZT=5mA)	VZ	4.4	4.7	5.0	V
Operating resistance (IZT=5mA)	ZZT	-	-	80	Ω
Rising operating resistance (IZK=0.5mA)	ZZK	-	-	800	Ω
Reverse current (VR=2V)	IR	-	-	3	μA
Capacitance (VR=0 , f=1 MHz)	C	-	-	260	pF

2. Zener voltage is measured with a pulse test current IZ at an ambient temperature of 25°C.

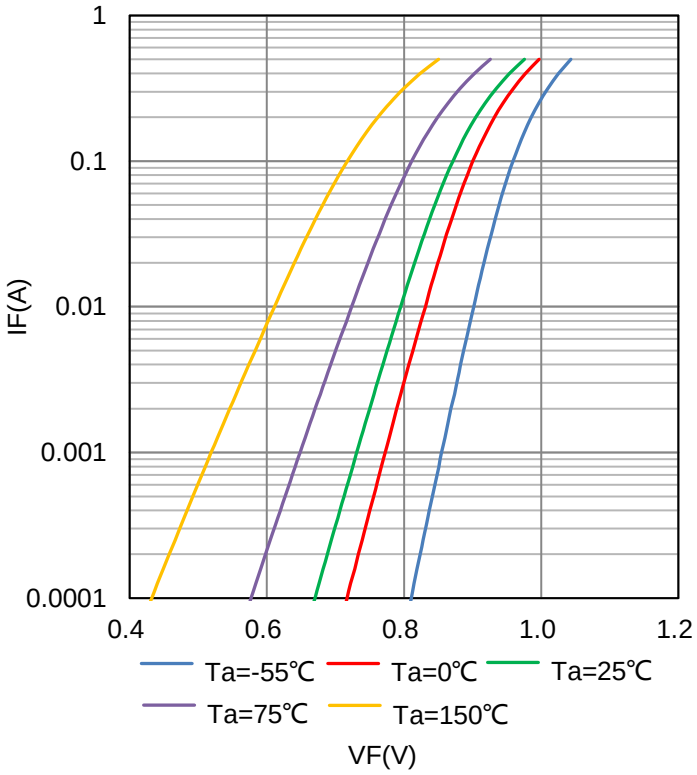
6. ELECTRICAL CHARACTERISTICS CURVES



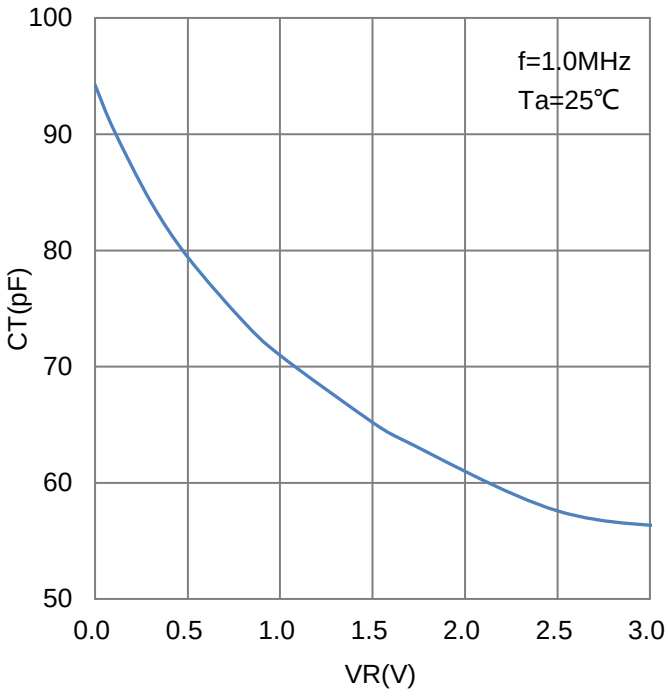
IR vs.VR



IZ vs. VZ

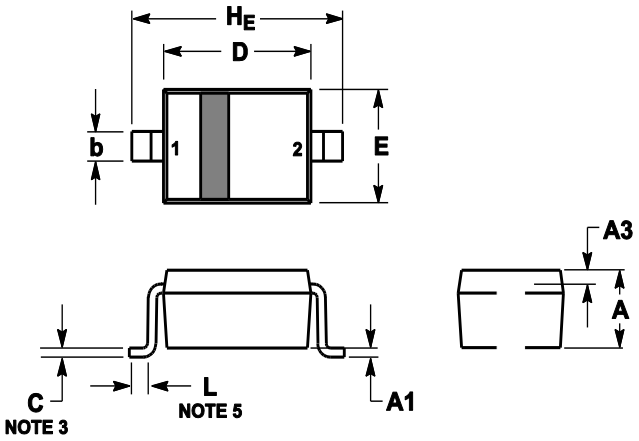


IF vs. VF



CT vs.VR

7.OUTLINE AND DIMENSIONS

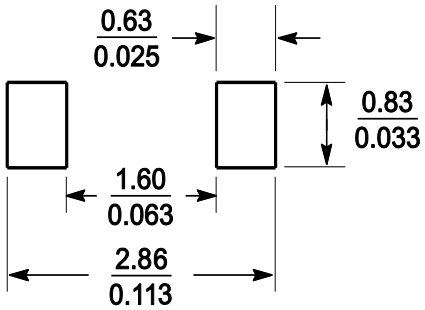


Notes:

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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