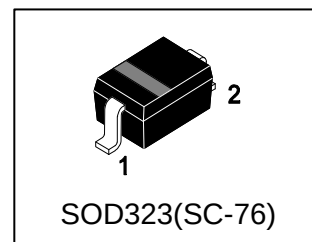


LM3Z12VT1G

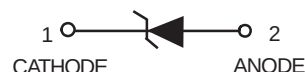
Zener Voltage Regulators

200 mW SOD-323 Surface Mount



1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- 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
LM3Z12VT1G	0N	3000/Tape&Reel
LM3Z12VT3G	0N	13000/Tape&Reel

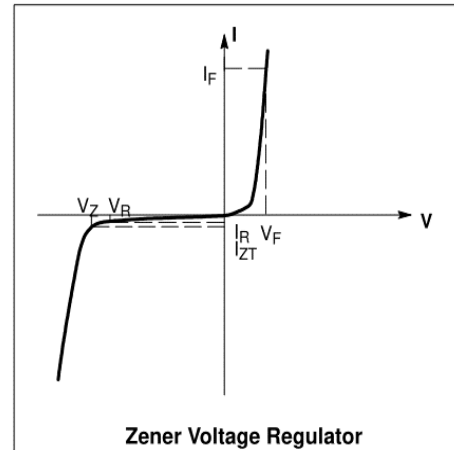
3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C	PD	200	mW
Thermal Resistance, Junction-to-Ambient	R _{θJA}	400	°C/W
Junction-to-Case	R _{θJC}	175	
Junction temperature	T _j	-65 ~ +150	°C
Storage temperature	T _{stg}	-65 ~ +150	°C

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

4. ELECTRICAL CHARACTERISTICS (Ta= 25 °C)

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

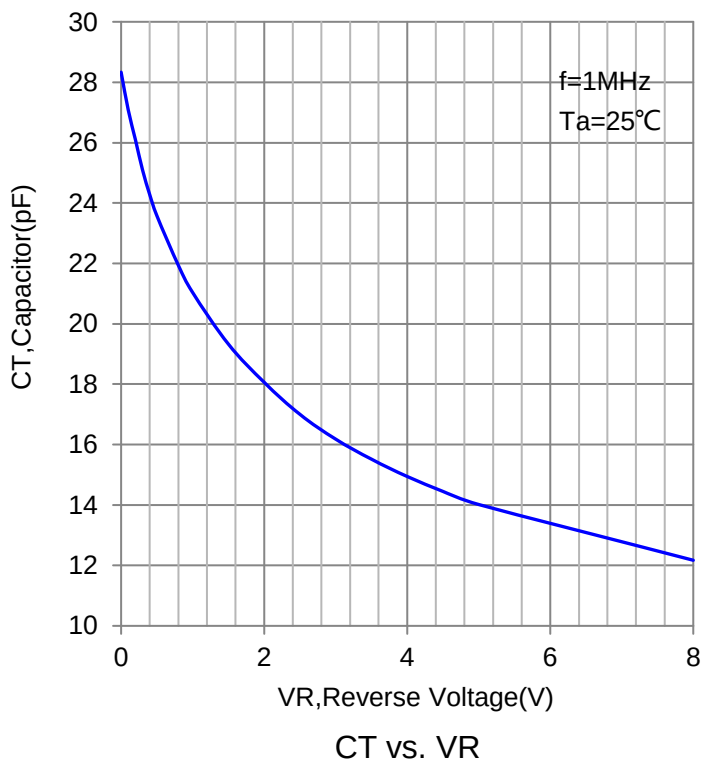
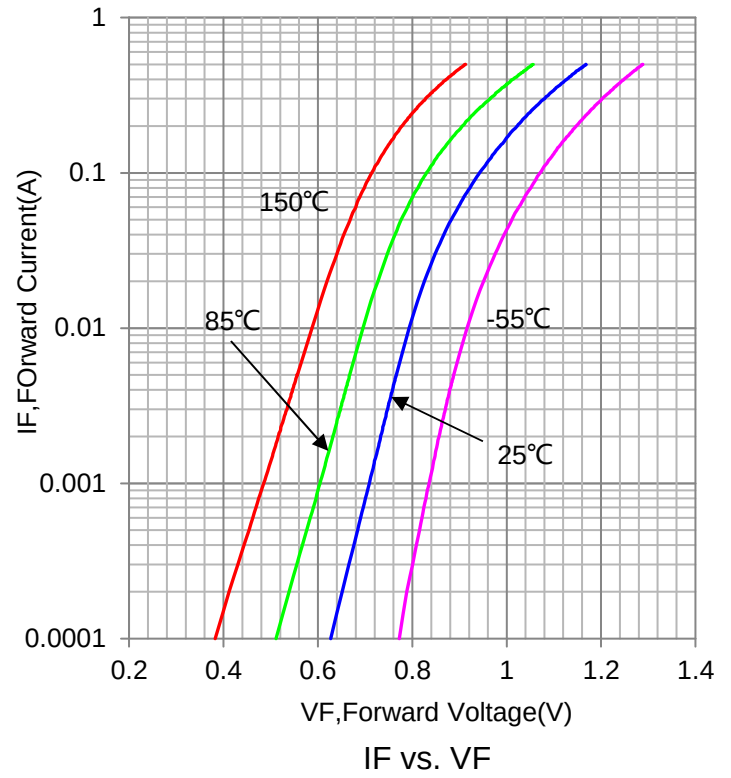
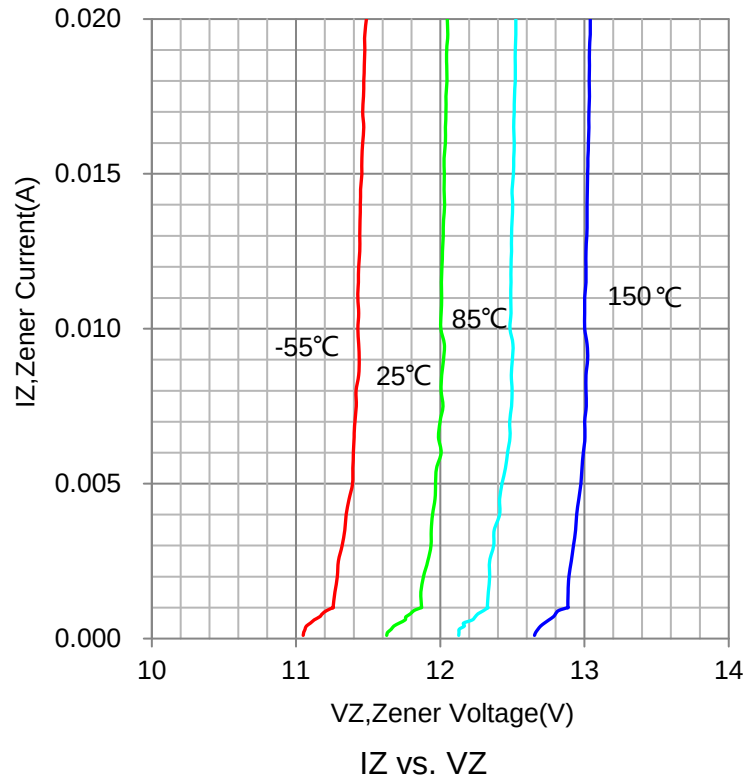


5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage (IF = 10mA)	VF	-	-	0.9	V
Zener voltage (IZT=5mA)	VZ	11.4	12	12.7	V
Operating resistance (IZT=5mA)	ZZT	-	-	25	Ω
Rising operating resistance (IZK=0.5mA)	ZZK	-	-	80	Ω
Reverse current (VR=8V)	IR	-	-	0.1	μA
Capacitance (VR = 0 , f = 1 MHz)	C	-	-	130	pF

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

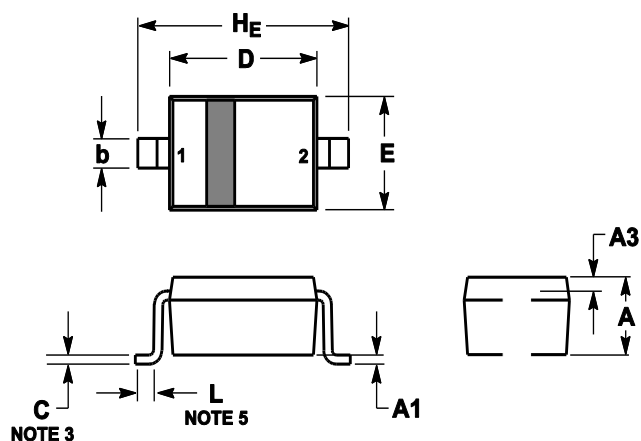
6.ELECTRICAL CHARACTERISTICS CURVES



7.OUTLINE AND DIMENSIONS

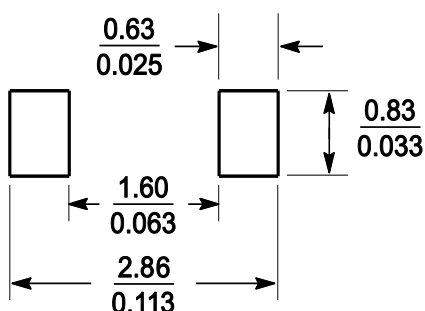
Notes:

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.



DIM	MILLIMETERS			INCHES		
	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.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.