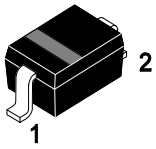
LM3Z13VT1G
S-LM3Z13VT1G

Zener Voltage Regulators
200 mW SOD-323 Surface Mount

1. FEATURES

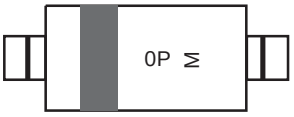
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Steady state power rating of 200 mW
- ESD rating of class 3 per human body model



SOD323(SC-76)



MARKING DIAGRAM



0P =Specific Device Code
M =Date Code

2. DEVICE MARKING AND ORDERING INFORMATION

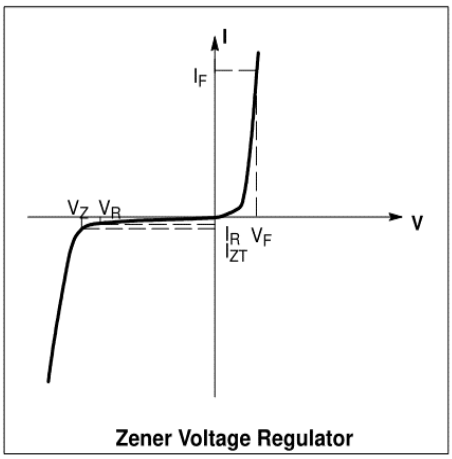
Device	Marking	Shipping
LM3Z13VT1G	0P	3000/Tape&Reel
LM3Z13VT3G	0P	10000/Tape&Reel

3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−5 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	 200 1.5	 mW mW/ºC
Thermal Resistance, Junction–to–Ambient	RΘJA	635	ºC/W
Junction and Storage temperature	TJ,Tstg	−65～+150	ºC

4. ELECTRICAL CHARACTERISTICS (Ta= 25 ºC)(VF = 0.9 V Max. @ IF = 10 mA for all types)

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



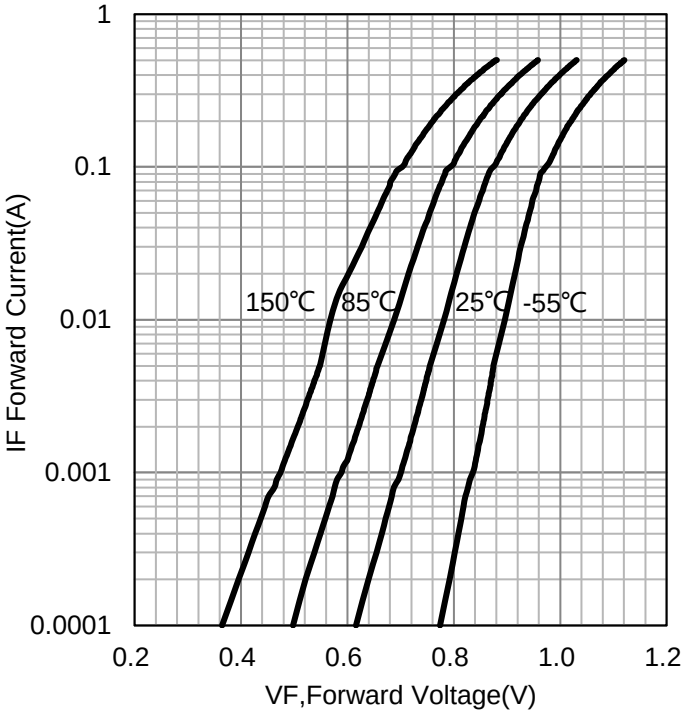
Zener Voltage Regulator

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

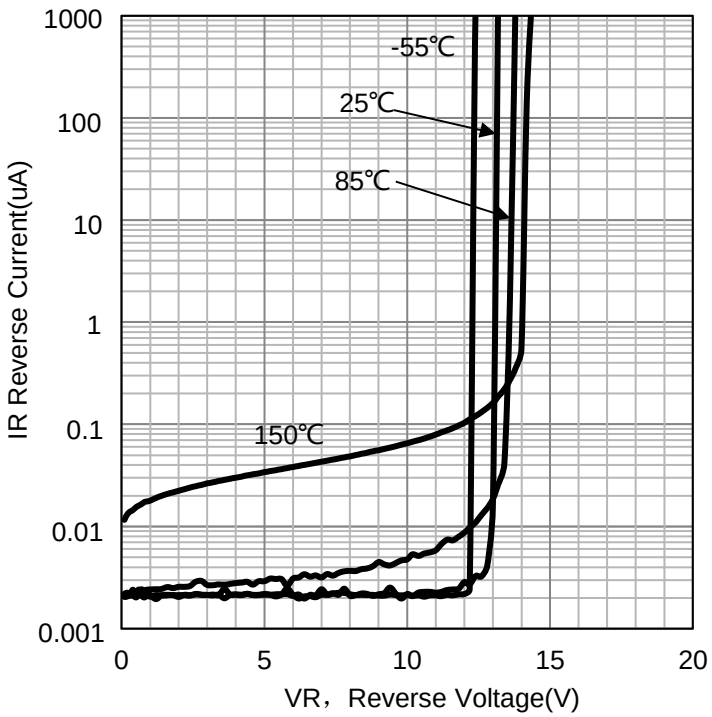
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Zener voltage (IZT=5mA)	VZ	12.4	13.25	14.1	V
Operating resistance (IZT=5mA)	ZZT	-	-	30	Ω
Rising operating resistance (IZK=0.5mA)	ZZK	-	-	80	Ω
Reverse current (VR=8V)	IR	-	-	0.1	μA
Maximum Temperature Coefficient of VZ (IZT=5mA)	ΘVZ	7	-	11	mV/k
Capacitance (VR=0 , f=1 MHz)	C	-	-	120	pF

1. FR–4 Minimum Pad
2. Zener voltage is measured with a pulse test current IZ at an ambient temperature of 25°C.

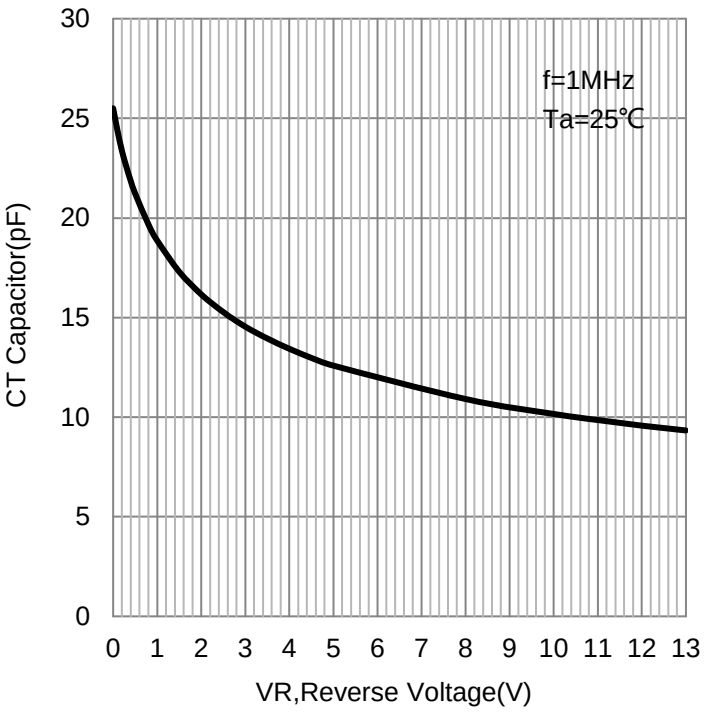
6. ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

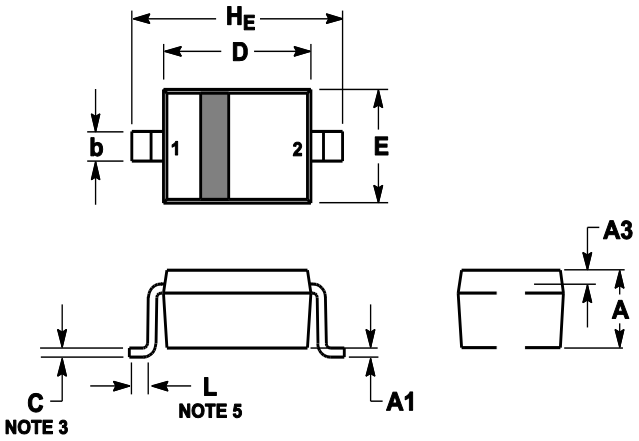


IR vs. VR



Capacitance

7.OUTLINE AND DIMENSIONS

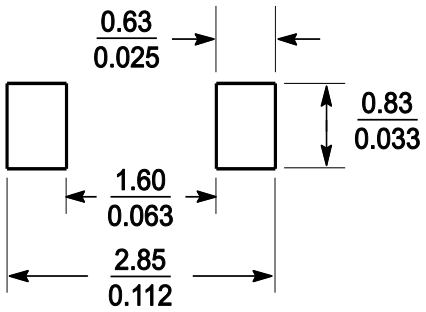


Notes:

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



Unikeyic Electronics

Global Electronic Components Distributor

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LRC:

SZAF5.1A S-LUDZS3.3BT1G LM3Z18VT1G LM5Z7V5T1G LMBR0520T1G LMSZ5245BT1G LMBT4403LT1G LTL431APTLT1G P6KE150A SZA12A LESD5Z5.0T1G LMBR1100ET1G LMSZ5252BT1G LUDZS5.6BT1G LDTC123JET1G LM3Z5V6T1G LMSZ5248BT1G S-L1N4148WT1G L2N7002FLT1G LMBT4401LT1G LMBTA92LT1G LMSZ5243BT1G LR78M05D S-LMSZ5265BT1G LM5Z3V3T1G L1SS184LT1G L2N7002KWT1G L9014QLT1G LMBTA13LT1G SM2100AF