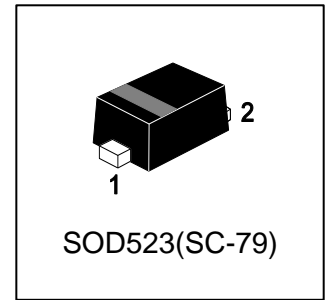


LM5Z5V1T1G

S-LM5Z5V1T1G

Zener Voltage Regulators



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.
- Standard Zener Breakdown Voltage: 5.1 V
- Steady State Power Rating of 200 mW
- ESD Rating of Class 3 per Human Body Model
- Device Meets MSL 1 Requirements

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LM5Z5V1T1G	0A	3000/Tape&Reel
LM5Z5V1T5G	0A	8000/Tape&Reel

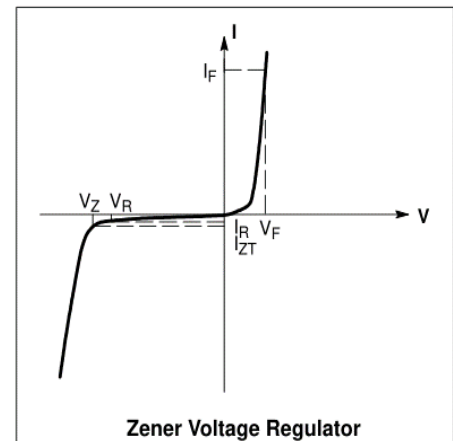
3. MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Total Device Dissipation FR-5 Board, @ TA = 25°C	PD	200	mW
Thermal Resistance Junction-to-Ambient	R θ JA	635	°C/W
Thermal Resistance Junction-to-Case	R θ JC	350	°C/W
Junction and Storage Temperature Range	TJ, Tstg	-65~+150	°C

4. ELECTRICAL CHARACTERISTICS(TA = 25°C unless otherwise noted)

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
Θ VZ	Maximum Temperature Coefficient of VZ
C	Max. Capacitance @ VR = 0 and f = 1 MHz

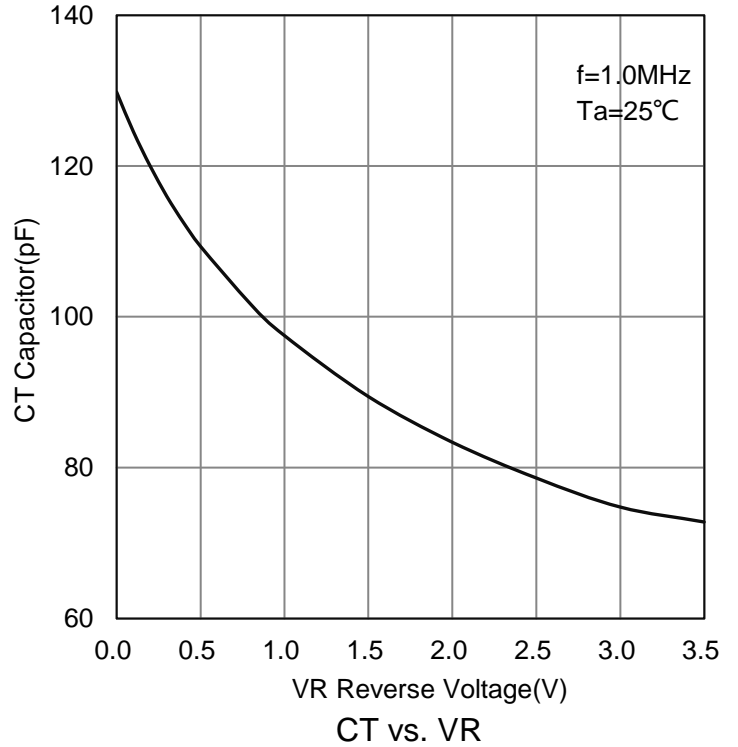
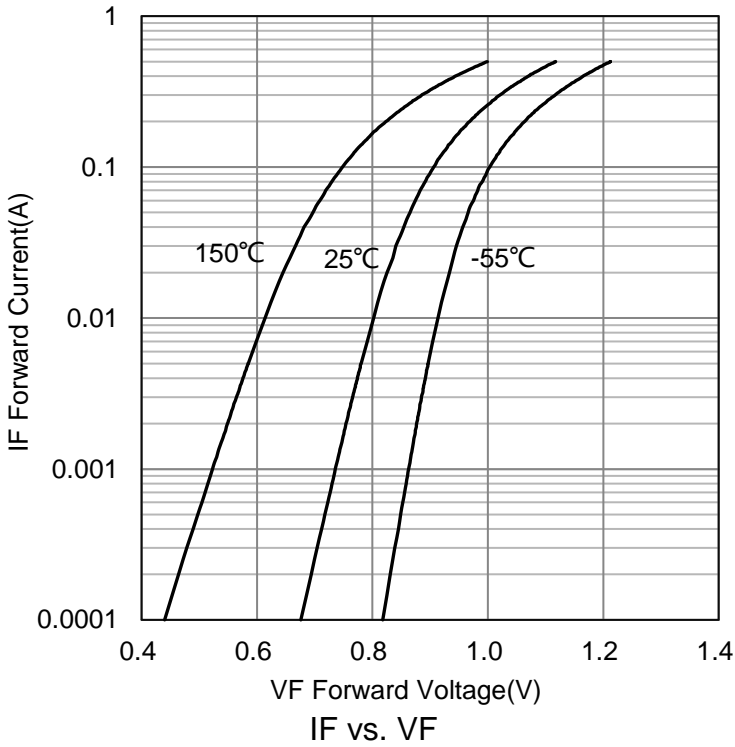
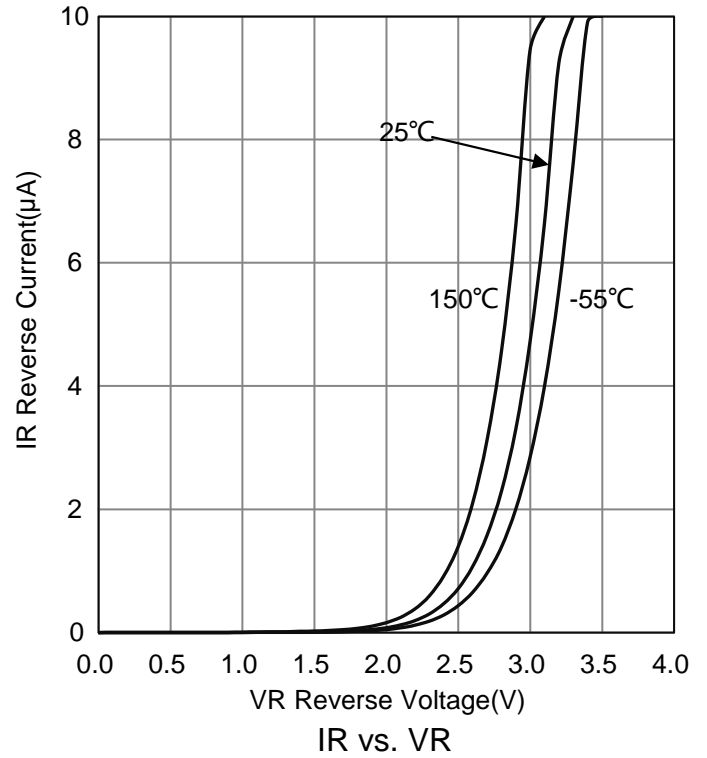
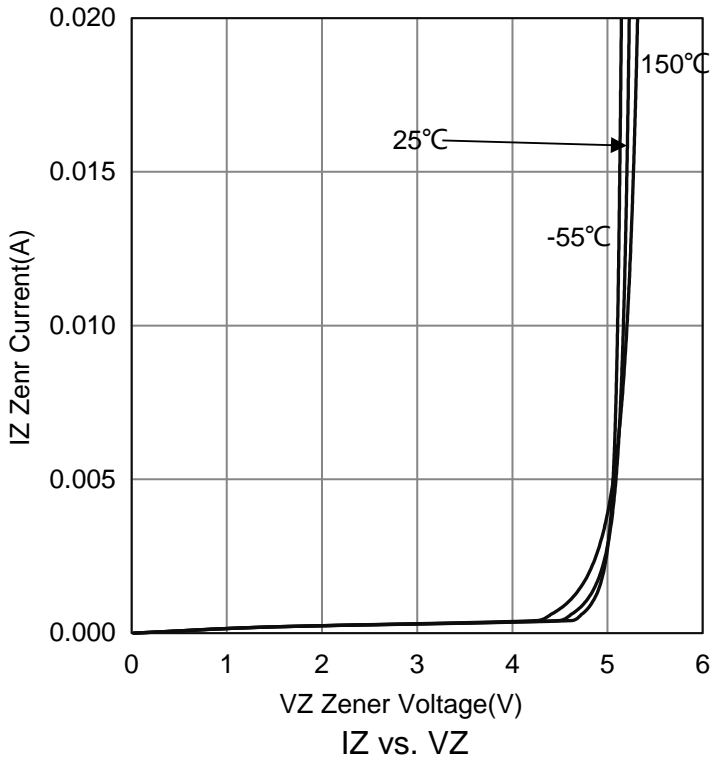


5. ELECTRICAL CHARACTERISTICS

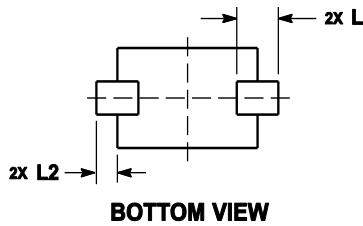
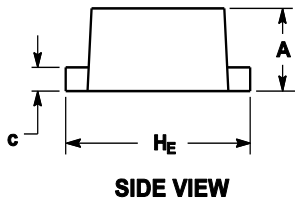
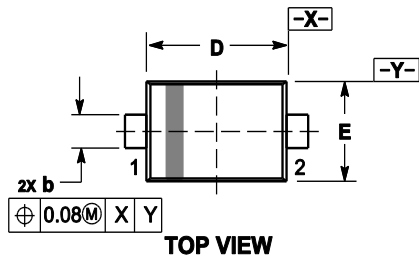
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Zener Voltage ($I_{ZT}=5\text{mA}$)	VZ	4.8	5.1	5.4	V
Maximum Zener Impedance ($I_{ZT}=5\text{mA}$)	ZZT	-	-	60	Ω
Maximum Zener Impedance ($I_{ZK}=1\text{mA}$)	ZZK	-	-	500	Ω
Reverse Leakage Current ($V_R=2\text{V}$)	IR	-	-	2	μA
Temperature Coefficient of VZ ($I_{ZT}=5\text{mA}$)	θ_{VZ}	-2.7	-	1.2	mV/k
Maximum Capacitance ($V_R = 0, f = 1\text{ MHz}$)	C	-	-	225	pF

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

6.ELECTRICAL CHARACTERISTICS CURVES



7. OUTLINE AND DIMENSIONS

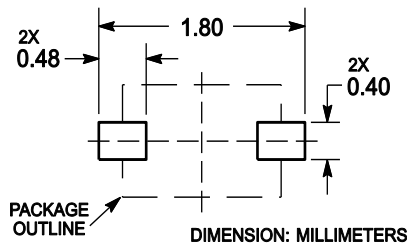


Notes:

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	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H _E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L ₂	0.15	0.20	0.25	0.006	0.008	0.010

8. SOLDERING FOOTPRINT



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