

LMBZ5231BLT1G

S-LMBZ5231BLT1G

Zener Voltage Regulators

1. FEATURES

- 225 mW Rating on FR-4 or FR-5 Board.
- Small Package Size for High Density Applications.
- ESD Rating of Class 3 (>8 KV) per Human Body Model.
- 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

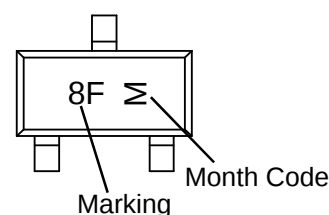
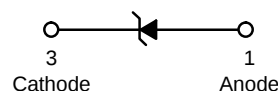
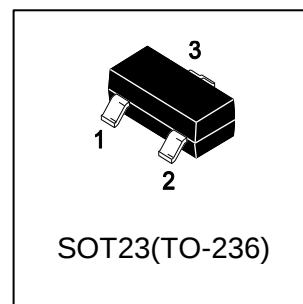
Device	Marking	Shipping
LMBZ5231BLT1G	8F	3000/Tape&Reel
S-LMBZ5231BLT1G	8F	3000/Tape&Reel
LMBZ5231BLT3G	8F	10000/Tape&Reel
S-LMBZ5231BLT3G	8F	10000/Tape&Reel

3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	225 1.8	mW mW/°C
Thermal Resistance Junction-to-Ambient	R θ JA	556	°C/W
Total Device Dissipation, Alumina Substrate (Note 2) @ TA = 25°C Derate above 25°C	PD	300 2.4	mW mW/°C
Thermal Resistance Junction-to-Ambient	R θ JA	417	°C/W
Junction and Storage temperature	TJ,Tstg	-65 ~ +150	°C

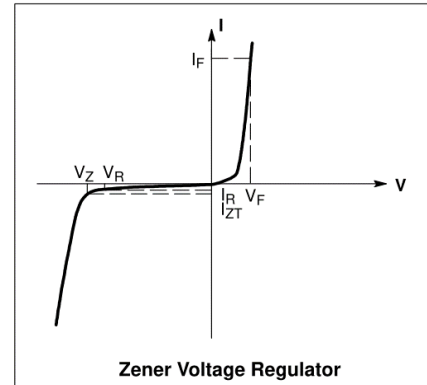
1.FR-5 = 1.0 × 0.75 × 0.062 in.

2.Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.



4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)(VF = 0.95 V Max. @ IF = 10 mA)

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

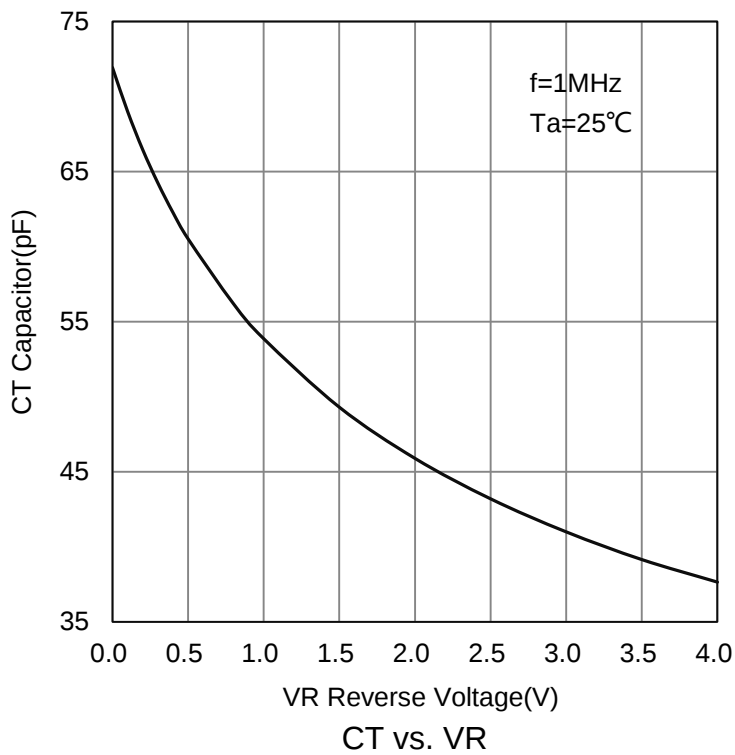
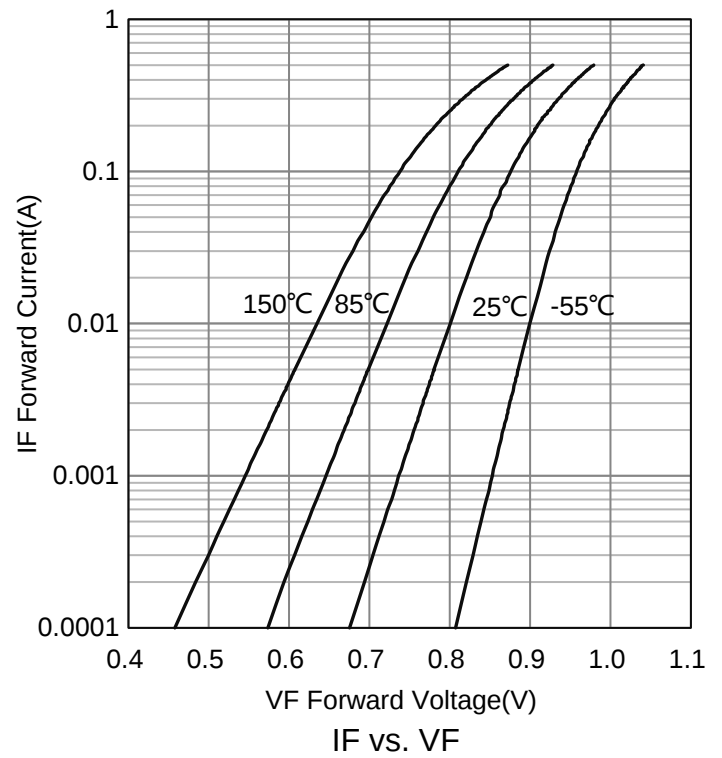
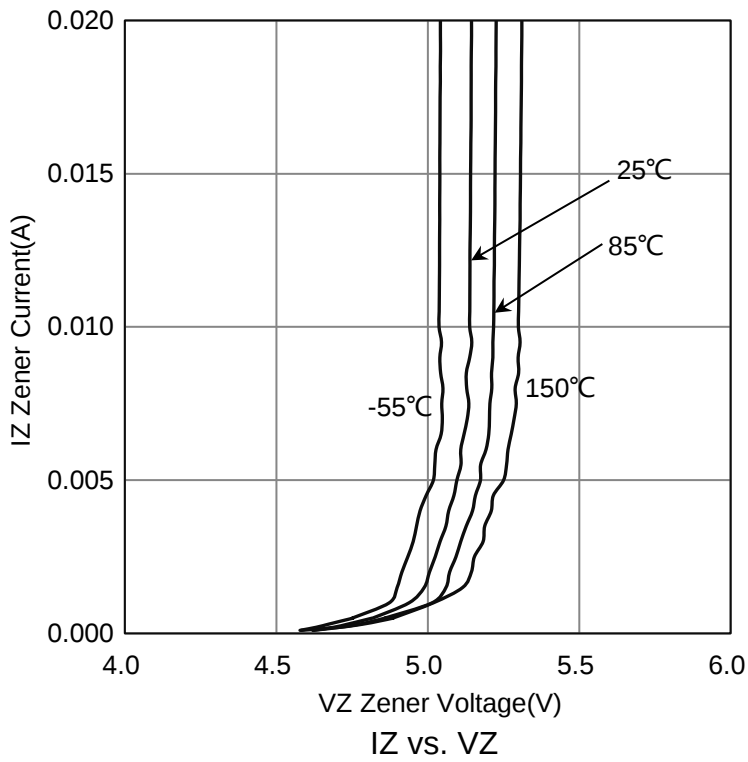


5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Zener Voltage(Note 3) (IZT= 20 mA)	VZ	4.84	5.1	5.36	V
Zener Impedance (IZT =20mA)	ZZT	-	-	17	Ω
Zener Impedance (IZK=0.25mA)	ZZK	-	-	1600	Ω
Leakage Current (VR=2V)	IR	-	-	5	μA

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

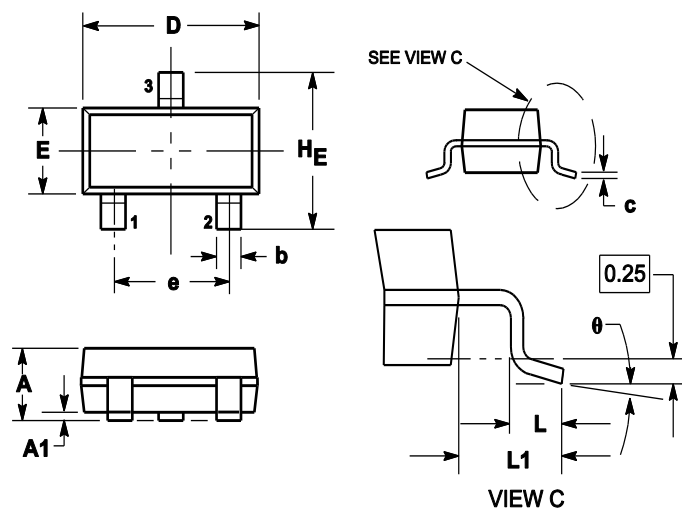
6.ELECTRICAL CHARACTERISTICS CURVES



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	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H _E	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

8.SOLDERING FOOTPRINT

