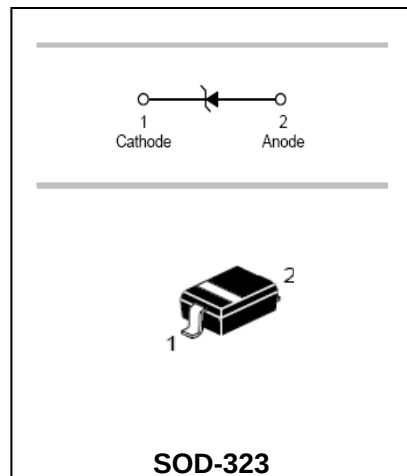


Zener diode Regulators

LM3Z2V0T1G-LM3Z68VT1G

FEATURES

- Standard Zener Breakdown Voltage
Range – 2.4 V to 75 V
- Steady State Power Rating of 200 mW
- IESD Rating of Class 3 (>16 kV) per Human Body Model



APPLICATIONS

- Zener diode
- Ultra-small surface mount package

ORDERING INFORMATION

Type No.	Marking	Package Code
LM3Z2V0T1G-LM3Z68VT1G	See table 2	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage @ I _F =10mA	V _F	0.9	V
Power Dissipation	P _d	200	mW
Thermal resistance, junction to ambient air	R _{θJA}	635	°C/W
Junction temperature	T _J	-65 to +150	°C
Storage temperature range	T _{stg}	-65 to +150	°C



Zener diode Regulators

LM3Z2V0T1G-LM3Z68VT1G

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Temperature Coefficient of zener voltage @ I _{ZTC} mV/°C	
		V _Z @I _{ZT}			I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R	@V _R	I _{ZTC} mV/°C	
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V	Min	Max
LM3Z2V0T1G	WY	2.0	1.91	2.09	5	100	600	1.0	150	1.0	-3.5	0
LM3Z2V4T1G	WX	2.4	2.2	2.60	5	100	600	1.0	50	1.0	-3.5	0
LM3Z2V7T1G	W1	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0
LM3Z3V0T1G	W2	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0
LM3Z3V3T1G	W3	3.3	3.1	3.5	5	95	600	1.0	5	1.0	-3.5	0
LM3Z3V6T1G	W4	3.6	3.4	3.8	5	90	600	1.0	5	1.0	-3.5	0
LM3Z3V9T1G	W5	3.9	3.7	4.1	5	90	600	1.0	3	1.0	-3.5	0
LM3Z4V3T1G	W6	4.3	4.0	4.6	5	90	600	1.0	3	1.0	-3.5	0
LM3Z4V7T1G	W7	4.7	4.4	5.0	5	80	500	1.0	3	2.0	-3.5	0.2
LM3Z5V1T1G	W8	5.1	4.8	5.4	5	60	480	1.0	2	2.0	-2.7	1.2
LM3Z5V6T1G	W9	5.6	5.2	6.0	5	40	400	1.0	1	2.0	-2.0	2.5
LM3Z6V2T1G	WA	6.2	5.8	6.6	5	10	150	1.0	3	4.0	0.4	3.7
LM3Z6V8T1G	WB	6.8	6.4	7.2	5	15	80	1.0	2	4.0	1.2	4.5
LM3Z7V5T1G	WC	7.5	7.0	7.9	5	15	80	1.0	1	5.0	2.5	5.3
LM3Z8V2T1G	WD	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2
LM3Z9V1T1G	WE	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0
LM3Z10T1G	WF	10	9.4	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0
LM3Z11T1G	WG	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0
LM3Z12T1G	WH	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0
LM3Z13T1G	WI	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0
LM3Z15T1G	WJ	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0
LM3Z16T1G	WK	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0
LM3Z18T1G	WL	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0
LM3Z20T1G	WM	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0
LM3Z22T1G	WN	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0
LM3Z24T1G	WO	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0
LM3Z27T1G	WP	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3
LM3Z30T1G	WQ	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4
LM3Z33T1G	WR	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4
LM3Z36T1G	WS	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4
LM3Z39T1G	WT	39	37.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2
LM3Z43T1G	WU	43	40.0	46.0	5	100	700	1.0	0.1	32	10.0	12.0
LM3Z47T1G	WV	47	44.0	50.0	5	100	750	1.0	0.1	35	10.0	12.0
LM3Z51T1G	WW	51	48.0	54.0	5	100	750	1.0	0.1	38	10.0	12.0



Zener diode Regulators

LM3Z2V0T1G-LM3Z68VT1G

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse		Temperature Coefficient of zener voltage @ I_{ZTC} mV/°C	
		$V_Z @ I_{ZT}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	I_R	@ V_R		
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V	Min	Max
LM3Z56T1G	WX	56	53.2	58.8	2	200	400	0.5	0.045	39.2	10.0	12.0
LM3Z62T1G	WY	62	58.9	65.1	2	215	423	0.5	0.045	43.4	10.0	12.0
LM3Z68T1G	WZ	68	64.6	71.4	2	240	447	0.5	0.045	47.6	10.0	12.0

TYPICAL CHARACTERISTICS @ $T_a = 25^\circ\text{C}$ unless otherwise specified

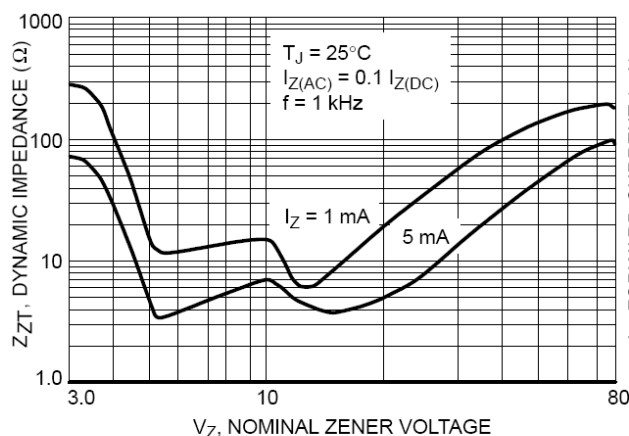


Figure 1. Effect of Zener Voltage on Zener Impedance

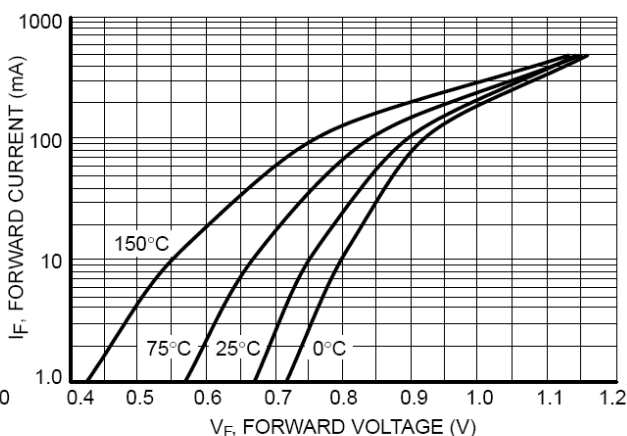


Figure 2. Typical Forward Voltage

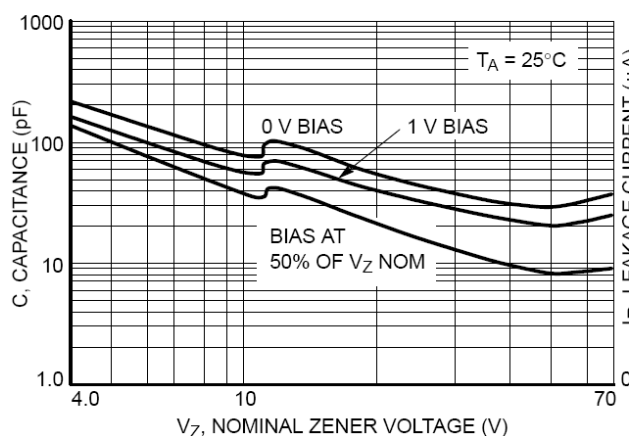


Figure 3. Typical Capacitance

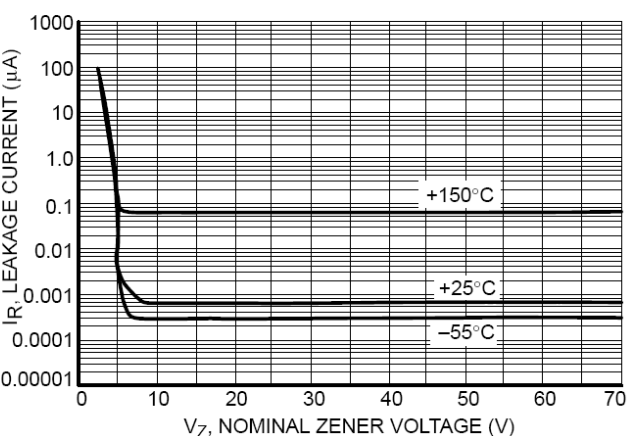


Figure 4. Typical Leakage Current

Zener diode Regulators

LM3Z2V0T1G-LM3Z68VT1G

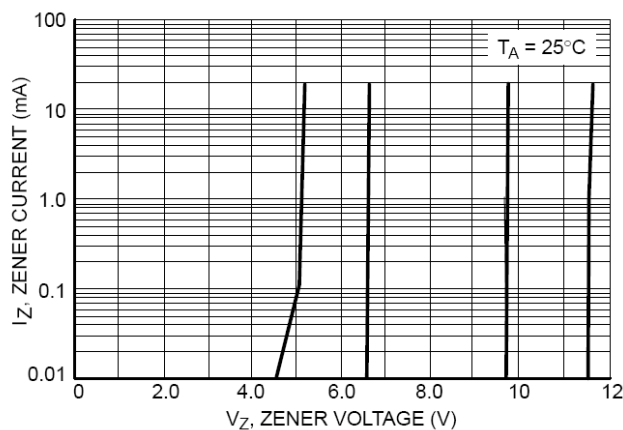


Figure 5. Zener Voltage versus Zener Current
(V_Z Up to 12 V)

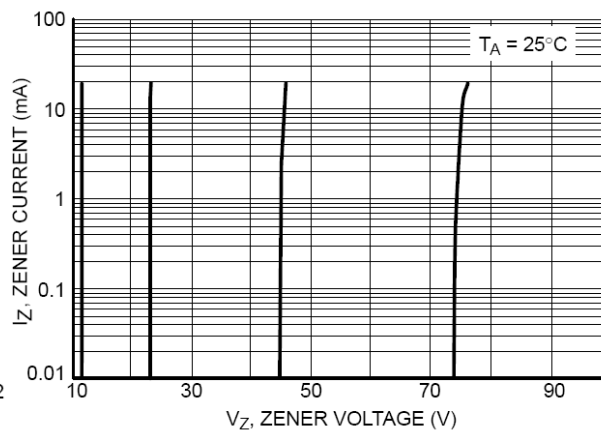


Figure 6. Zener Voltage versus Zener Current
(12 V to 75 V)

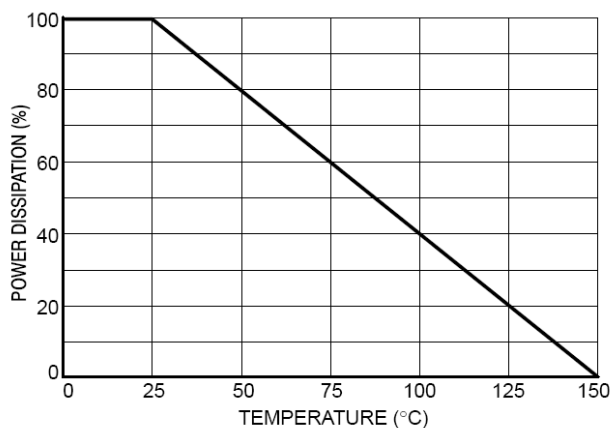


Figure 7. Steady State Power Derating

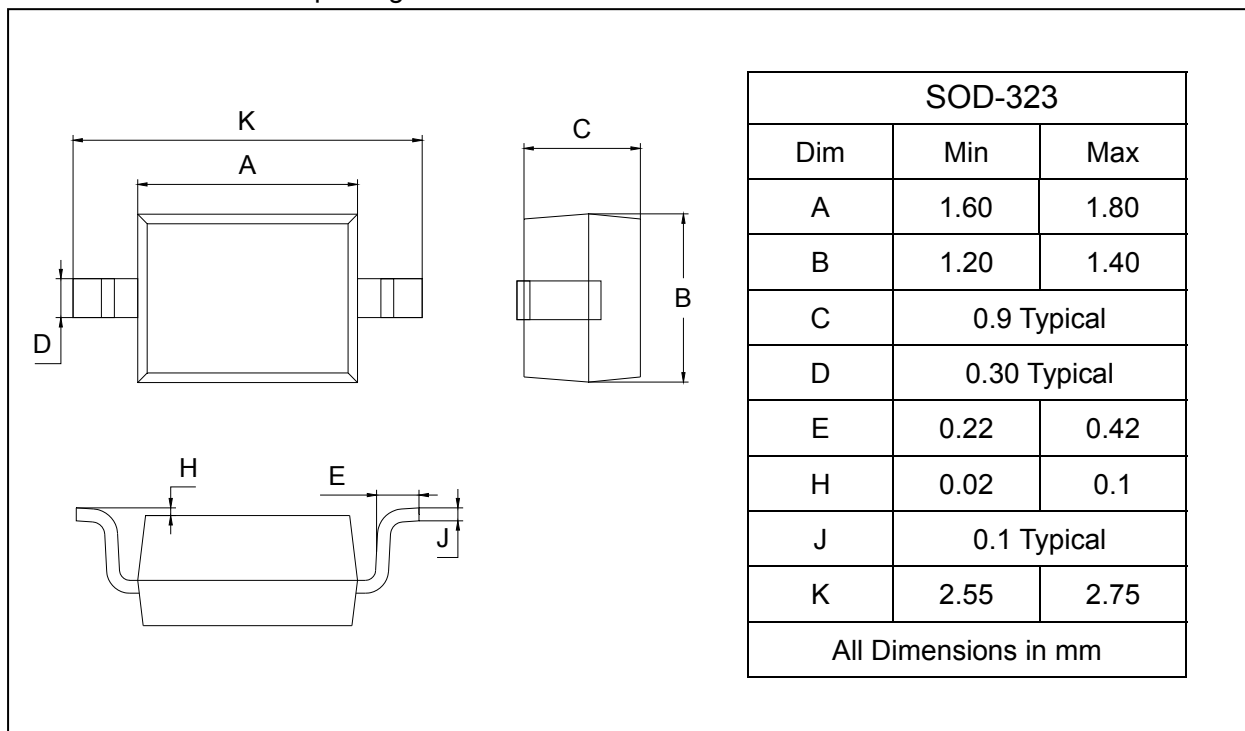
Zener diode Regulators

LM3Z2V0T1G-LM3Z68VT1G

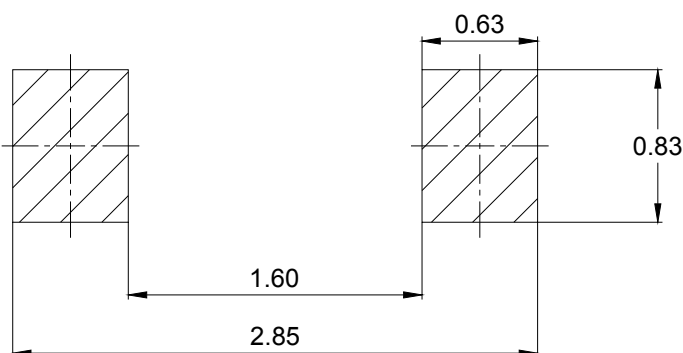
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
LM3Z2V0T1G-LM3Z68VT1G	SOD-323	3000/Tape&Reel