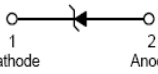
Surface mount zener diode **TMMSZ5221BSG-TMMSZ5263BSG**

FEATURES

- Planar die construction
- General purpose, medium current
- Ideally suited for automated assembly processes
- Non-Halogen.
- Qualified to AEC-Q101 Standards for High Reliability

Lead-free

HF



SOD-323

APPLICATIONS

- Zener diode
- Ultra-small surface mount package

ORDERING INFORMATION

Type No.	Marking	Package Code
TMMSZ5221BSG-TMMSZ5263BSG	See table 2	SOD-323

MAXIMUM RATING @ Ta=25℃ 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	$R_{\theta jA}$	625	℃/W
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-65 to+150	℃

Notes: 1. Valid provided that device terminals are kept at ambient temperature.

2. Tested with pulses, t ≤1.0ms.

Surface mount zener diode **TMMSZ5221BSG-TMMSZ5263BSG**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Type Number	Marking Code	Zener Voltage Range			Test Current	Maximum Zener Impedance		Maximum Reverse Leakage Current	
		V_z@I_{ZT}			I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}=0.25mA	I_R	@V_R
		Nom(V)	Min(V)	Max(V)	mA	Ω		μA	V
TMMSZ5221BSG	C1	2.4	2.28	2.52	20	30	1200	100	1.0
TMMSZ5223BSG	C3	2.7	2.57	2.84	20	30	1300	75	1.0
TMMSZ5225BSG	C5	3.0	2.85	3.15	20	30	1600	50	1.0
TMMSZ5226BSG	G1	3.3	3.14	3.47	20	28	1600	25	1.0
TMMSZ5227BSG	G2	3.6	3.42	3.78	20	24	1700	15	1.0
TMMSZ5228BSG	G3	3.9	3.71	4.10	20	23	1900	10	1.0
TMMSZ5229BSG	G4	4.3	4.09	4.52	20	22	2000	5.0	1.0
TMMSZ5230BSG	G5	4.7	4.47	4.94	20	19	1900	5.0	2.0
TMMSZ5231BSG	E1	5.1	4.85	5.36	20	17	1600	5.0	2.0
TMMSZ5232BSG	E2	5.6	5.32	5.88	20	11	1600	5.0	3.0
TMMSZ5233BSG	E3	6.0	5.70	6.30	20	7	1600	5.0	3.5
TMMSZ5234BSG	E4	6.2	5.89	6.51	20	7	1000	5.0	4.0
TMMSZ5235BSG	E5	6.8	6.46	7.14	20	5	750	3.0	5.0
TMMSZ5236BSG	F1	7.5	7.13	7.88	20	6	500	3.0	6.0
TMMSZ5237BSG	F2	8.2	7.79	8.61	20	8	500	3.0	6.5
TMMSZ5238BSG	F3	8.7	8.27	9.14	20	8	600	3.0	6.5
TMMSZ5239BSG	F4	9.1	8.65	9.56	20	10	600	3.0	7.0
TMMSZ5240BSG	F5	10	9.50	10.50	20	17	600	3.0	8.0
TMMSZ5241BSG	H1	11	10.45	11.55	20	22	600	2.0	8.4
TMMSZ5242BSG	H2	12	11.40	12.60	20	30	600	1.0	9.1
TMMSZ5243BSG	H3	13	12.35	13.65	9.5	13	600	0.5	9.9
TMMSZ5245BSG	H5	15	14.25	15.75	8.5	16	600	0.1	11
TMMSZ5246BSG	J1	16	15.20	16.80	7.8	17	600	0.1	12
TMMSZ5248BSG	J3	18	17.10	18.90	7.0	21	600	0.1	14
TMMSZ5250BSG	J5	20	19.00	21.00	6.2	25	600	0.1	15
TMMSZ5251BSG	K1	22	20.90	23.10	5.6	29	600	0.1	17
TMMSZ5252BSG	K2	24	22.80	25.20	5.2	33	600	0.1	18
TMMSZ5254BSG	K4	27	25.65	28.35	5.0	41	600	0.1	21
TMMSZ5255BSG	K5	28	26.60	29.40	4.5	44	600	0.1	21
TMMSZ5256BSG	M1	30	28.50	31.5	4.2	49	600	0.1	23
TMMSZ5257BSG	M2	33	31.35	34.65	3.8	58	700	0.1	25
TMMSZ5258BSG	M3	36	34.20	37.80	3.4	70	700	0.1	27
TMMSZ5259BSG	M4	39	37.05	40.95	3.2	80	800	0.1	30
TMMSZ5260BSG	M5	43	40.85	45.15	3.0	93	900	0.1	33
TMMSZ5261BSG	M6	47	44.65	49.35	2.7	105	1000	0.1	36

Surface mount zener diode **TMMSZ5221BSG-TMMSZ5263BSG**

Type Number	Marking Code	Zener Voltage Range			Test Current	Maximum Zener Impedance		Maximum Reverse Leakage Current	
		V_Z@I_{ZT}			I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}=0.25mA	I_R	@V_R
		Nom(V)	Min(V)	Max(V)	mA	Ω		μA	V
TMMSZ5262BSG	M7	51	48.45	53.55	2.5	125	1100	0.1	39
TMMSZ5263BSG	M8	56	53.20	58.80	2.2	150	1300	0.1	43

Notes: 1. Valid provided that device terminals are kept at ambient temperature.
2. Tested with pulses, t≤1.0ms.

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

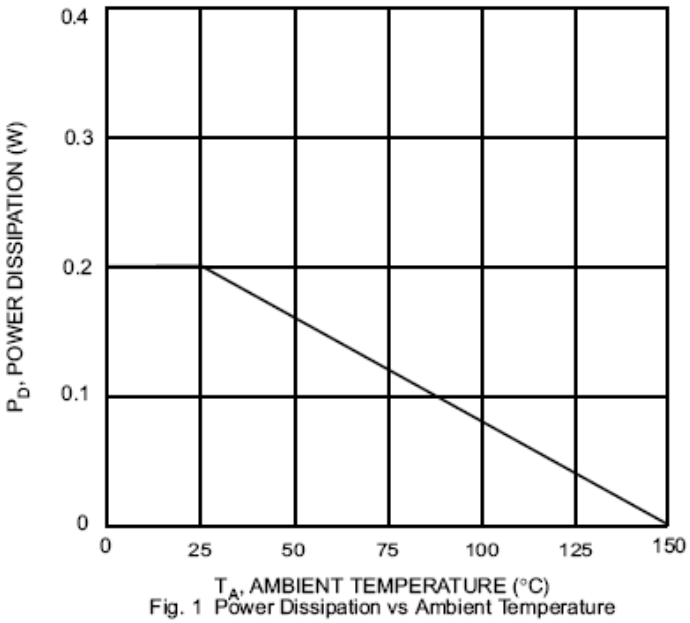
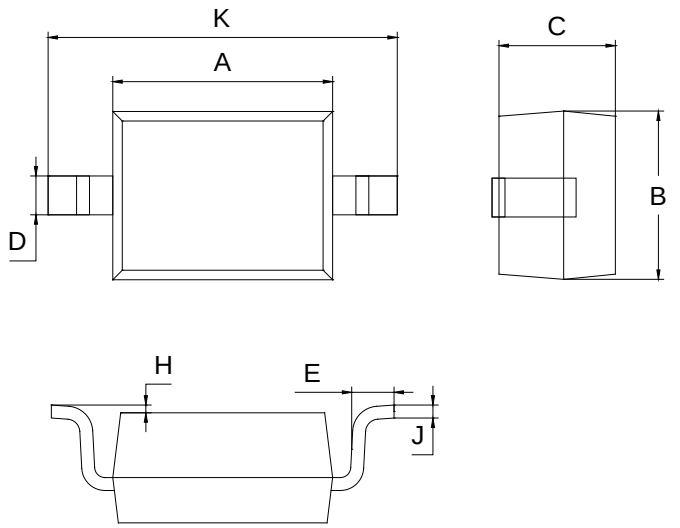


Fig. 1 Power Dissipation vs Ambient Temperature

Surface mount zener diode **TMMSZ5221BSG-TMMSZ5263BSG**

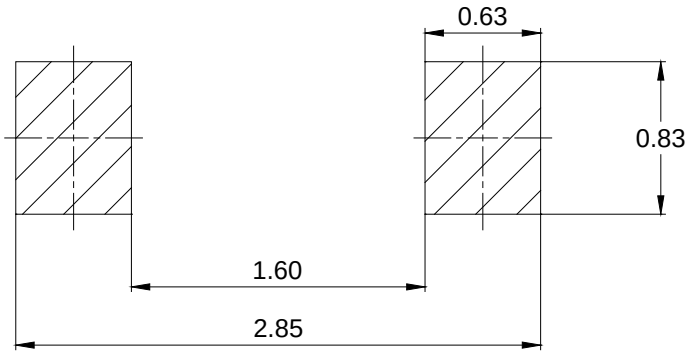
PACKAGE OUTLINE

Plastic surface mounted package SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit ： mm

PACKAGE INFORMATION

Device	Package	Shipping
TMMSZ5221BSG-TMMSZ5263BSG	SOD-323	3000/Tape&Reel