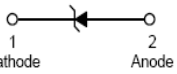
MMSZ5221BS-MMSZ5263BS

Surface mount zener diode

FEATURES

- Planar die construction
- General purpose, medium current
- Ideally suited for automated assembly processes

Lead-free





SOD-323

APPLICATIONS

- Zener diode
- Ultra-small surface mount package

ORDERING INFORMATION

Type No.	Marking	Package Code
MMSZ5221BS-MMSZ5263BS	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.

MMSZ5221BS-MMSZ5263BS

Surface mount zener diode

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
MMSZ5221BS	C1	2.4	2.28	2.52	20	30	1200	100	1.0
MMSZ5223BS	C3	2.7	2.57	2.84	20	30	1300	75	1.0
MMSZ5225BS	C5	3.0	2.85	3.15	20	30	1600	50	1.0
MMSZ5226BS	G1	3.3	3.14	3.47	20	28	1600	25	1.0
MMSZ5227BS	G2	3.6	3.42	3.78	20	24	1700	15	1.0
MMSZ5228BS	G3	3.9	3.71	4.10	20	23	1900	10	1.0
MMSZ5229BS	G4	4.3	4.09	4.52	20	22	2000	5.0	1.0
MMSZ5230BS	G5	4.7	4.47	4.94	20	19	1900	5.0	2.0
MMSZ5231BS	E1	5.1	4.85	5.36	20	17	1600	5.0	2.0
MMSZ5232BS	E2	5.6	5.32	5.88	20	11	1600	5.0	3.0
MMSZ5233BS	E3	6.0	5.70	6.30	20	7	1600	5.0	3.5
MMSZ5234BS	E4	6.2	5.89	6.51	20	7	1000	5.0	4.0
MMSZ5235BS	E5	6.8	6.46	7.14	20	5	750	3.0	5.0
MMSZ5236BS	F1	7.5	7.13	7.88	20	6	500	3.0	6.0
MMSZ5237BS	F2	8.2	7.79	8.61	20	8	500	3.0	6.5
MMSZ5238BS	F3	8.7	8.27	9.14	20	8	600	3.0	6.5
MMSZ5239BS	F4	9.1	8.65	9.56	20	10	600	3.0	7.0
MMSZ5240BS	F5	10	9.50	10.50	20	17	600	3.0	8.0
MMSZ5241BS	H1	11	10.45	11.55	20	22	600	2.0	8.4
MMSZ5242BS	H2	12	11.40	12.60	20	30	600	1.0	9.1
MMSZ5243BS	H3	13	12.35	13.65	9.5	13	600	0.5	9.9
MMSZ5245BS	H5	15	14.25	15.75	8.5	16	600	0.1	11
MMSZ5246BS	J1	16	15.20	16.80	7.8	17	600	0.1	12
MMSZ5248BS	J3	18	17.10	18.90	7.0	21	600	0.1	14
MMSZ5250BS	J5	20	19.00	21.00	6.2	25	600	0.1	15
MMSZ5251BS	K1	22	20.90	23.10	5.6	29	600	0.1	17
MMSZ5252BS	K2	24	22.80	25.20	5.2	33	600	0.1	18
MMSZ5254BS	K4	27	25.65	28.35	5.0	41	600	0.1	21
MMSZ5255BS	K5	28	26.60	29.40	4.5	44	600	0.1	21
MMSZ5256BS	M1	30	28.50	31.5	4.2	49	600	0.1	23
MMSZ5257BS	M2	33	31.35	34.65	3.8	58	700	0.1	25
MMSZ5258BS	M3	36	34.20	37.80	3.4	70	700	0.1	27
MMSZ5259BS	M4	39	37.05	40.95	3.2	80	800	0.1	30
MMSZ5260BS	M5	43	40.85	45.15	3.0	93	900	0.1	33
MMSZ5261BS	M6	47	44.65	49.35	2.7	105	1000	0.1	36

MMSZ5221BS-MMSZ5263BS

Surface mount zener diode

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
MMSZ5262BS	M7	51	48.45	53.55	2.5	125	1100	0.1	39
MMSZ5263BS	M8		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

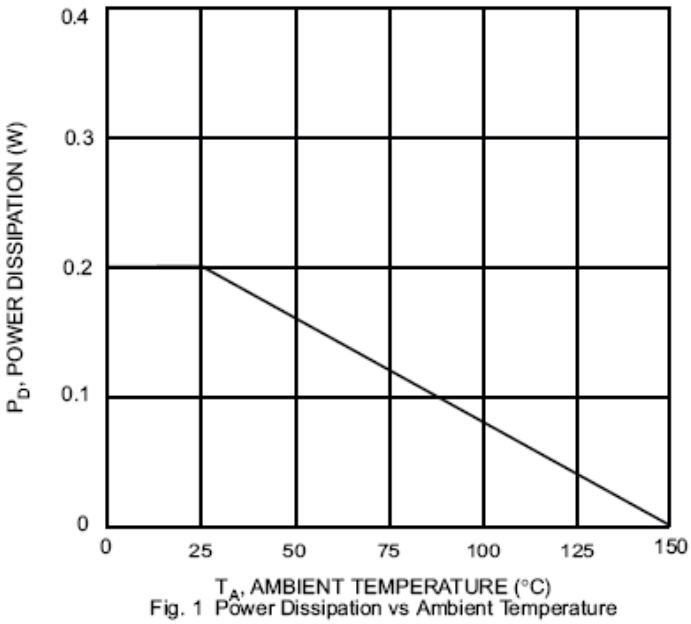


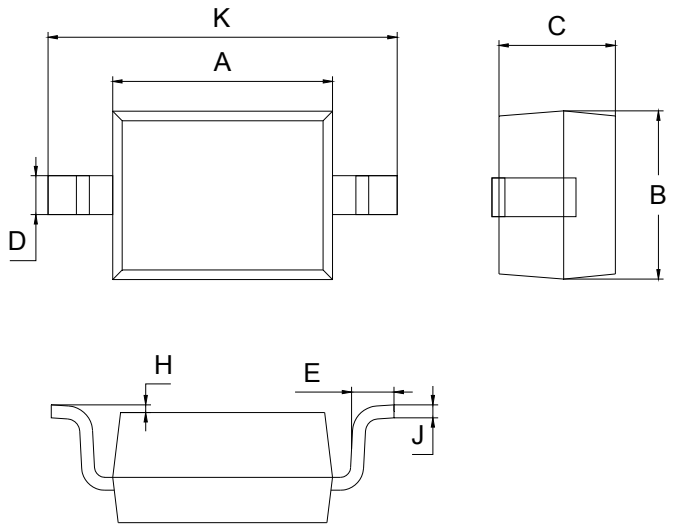
Fig. 1 Power Dissipation vs Ambient Temperature

MMSZ5221BS-MMSZ5263BS

Surface mount zener diode

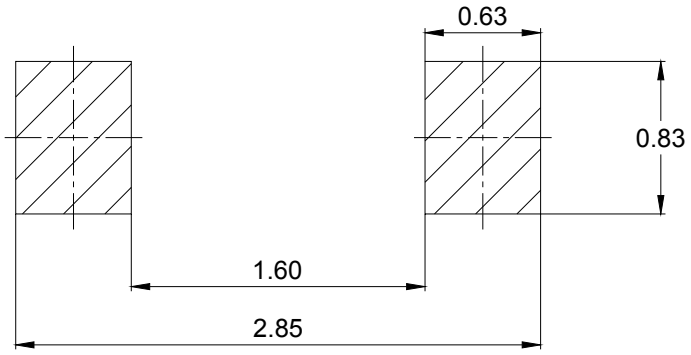
PACKAGE OUTLINE

Plastic surface mounted package SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.9 Max	
D	0.30 Typical	
E	0.22	0.42
H	0.02	0.1
J	0.1 Typical	
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit ： mm

PACKAGE INFORMATION

Device	Package	Shipping
MMSZ5221BS-MMSZ5263BS	SOD-323	3000/Tape&Reel