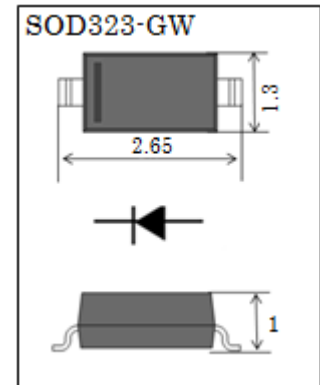


Zener Diodes / DATA SHEET
MMSZ5221BS – MMSZ5259BS series

- ◇ Constant Voltage control
- ◇ Wide Voltage Range Selection 2.4V to 59V
- ◇ **SOD323 Thin SMD** package
- ◇ RoHS compliant / Green EMC
- ◇ Matte Tin (Sn) Lead finish
- ◇ Cathode Band / Device marking
Refer to table list


Absolute Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C
I_{ZM}	Maximum Regulator Current	P_D/V_Z	mA

Electrical Characteristics (Ta = 25 °C)

Type Number	Device Marking	V_Z (V) *1			$Z_{zt}(\Omega)$ max.	I_Z (mA)	$Z_{zk}(\Omega)$ max.	I_{zk} (mA)	$I_R(\mu A)$ max.	V_R (V)
		min.	typ.	max.						
MMSZ5221BS	C1	2.28	2.40	2.52	30	20	1200	0.25	100	1.0
MMSZ5223BS	C3	2.57	2.70	2.84	30	20	1300	0.25	75	1.0
MMSZ5225BS	C5	2.85	3.00	3.15	29	20	1600	0.25	50	1.0
MMSZ5226BS	G1	3.14	3.30	3.47	28	20	1600	0.25	25	1.0
MMSZ5227BS	G2	3.42	3.60	3.78	24	20	1700	0.25	15	1.0
MMSZ5228BS	G3	3.70	3.90	4.10	23	20	1900	0.25	10	1.0
MMSZ5229BS	G4	4.09	4.30	4.52	22	20	2000	0.25	5	1.0
MMSZ5230BS	G5	4.47	4.70	4.94	19	20	1900	0.25	5	2.0
MMSZ5231BS	E1	4.85	5.10	5.36	17	20	1600	0.25	5	2.0
MMSZ5232BS	E2	5.32	5.60	5.88	11	20	1600	0.25	5	3.0
MMSZ5233BS	E3	5.70	6.00	6.30	7	20	1600	0.25	5	3.5
MMSZ5234BS	E4	5.89	6.20	6.51	7	20	1000	0.25	5	4.0

Continued next page

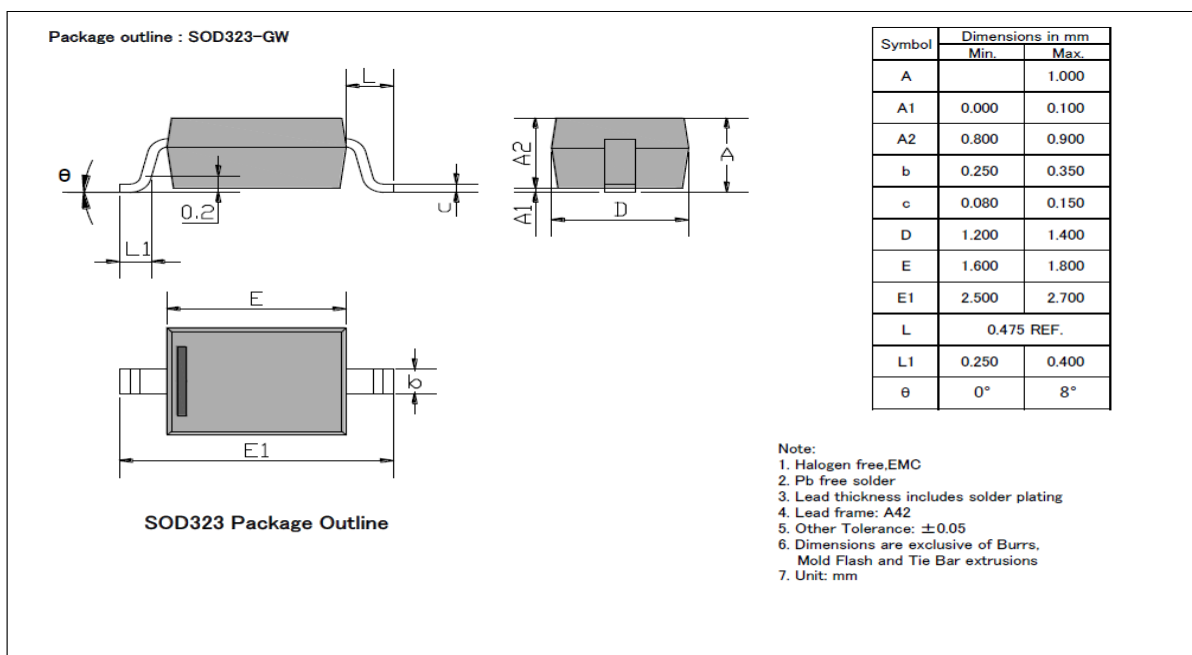
Electrical Characteristics (Ta = 25 °C)

Device No	Device Marking	Vz(V) *1			Zzt(Ω)	Iz (mA)	Zzk(Ω)	Izk (mA)	I _R (μA)	V _R (V)
		min.	typ.	max.	max.		max.		max.	
MMSZ5235BS	E5	6.46	6.80	7.14	5	20	750	0.25	3	5.0
MMSZ5236BS	F1	7.13	7.50	7.88	6	20	500	0.25	3	6.0
MMSZ5237BS	F2	7.79	8.20	8.61	8	20	500	0.25	3	6.5
MMSZ5238BS	F3	8.27	8.70	9.14	8	20	600	0.25	3	6.5
MMSZ5239BS	F4	8.65	9.10	9.56	10	20	600	0.25	3	7.0
MMSZ5240BS	F5	9.50	10.00	10.50	17	20	600	0.25	3	8.0
MMSZ5241BS	H1	10.45	11.00	11.55	22	20	600	0.25	2	8.4
MMSZ5242BS	H2	11.40	12.00	12.60	30	20	600	0.25	1	9.1
MMSZ5243BS	H3	12.35	13.00	13.65	13	9.5	600	0.25	0.5	9.9
MMSZ5244BS	H4	13.30	14.00	14.70	15	9.0	600	0.25	0.1	10.0
MMSZ5245BS	H5	14.25	15.00	15.75	16	8.5	600	0.25	0.1	11.0
MMSZ5246BS	J1	15.20	16.00	16.80	17	7.8	600	0.25	0.1	12.0
MMSZ5248BS	J3	17.10	18.00	18.90	21	7.0	600	0.25	0.1	14.0
MMSZ5250BS	J5	19.00	20.00	21.00	25	6.2	600	0.25	0.1	15.0
MMSZ5251BS	K1	20.90	22.00	23.10	29	5.6	600	0.25	0.1	17.0
MMSZ5252BS	K2	22.80	24.00	25.20	33	5.2	600	0.25	0.1	18.0
MMSZ5253BS	K3	23.75	25.00	26.25	35	5.0	600	0.25	0.1	19.0
MMSZ5254BS	K4	25.65	27.00	28.35	41	4.6	600	0.25	0.1	21.0
MMSZ5255BS	K5	26.60	28.00	29.40	44	4.5	600	0.25	0.1	21.0
MMSZ5256BS	M1	28.50	30.00	31.50	49	4.2	600	0.25	0.1	23.0
MMSZ5257BS	M2	31.35	33.00	34.65	58	3.8	700	0.25	0.1	25.0
MMSZ5258BS	M3	34.20	36.00	37.80	70	3.4	700	0.25	0.1	27.0
MMSZ5259BS	M4	37.05	39.00	40.95	80	3.2	800	0.25	0.1	30.0

*1 Pulse width = 10 ms

Ordering Information

type	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
MMSZ5221BS – MMSZ5259BS series	SOD323	Tape & Reel 3000pcs /7” Reel	8 mm	4 mm	Conductive	

Package Dimensions

NOTICE

POPPULA'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS COMPONENTS IN ANY LIFE SUPPORT DEVICES OR SYSTEMS.

POPPULA reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. POPPULA does not assume any liability arising out of the application or use of any product described herein.