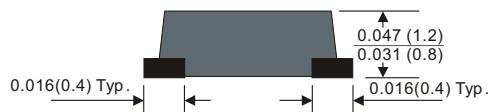
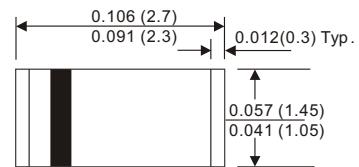


# MMSZ5221BS thru MMSZ5259BS

## SURFACE MOUNT ZENER DIODES



SOD-323



Dimensions in inches and (millimeters)

### FEATURES

- 200mW Power Dissipation
- High Voltages from 2.4V~39V
- Designed for mounting on small surface
- Extremely thin/leadless package

### MECHANICAL DATA

Case : Molded plastic, SOD-323  
Terminals : Solder plated, solderable per  
MIL-STD-750, Method 2026  
Polarity : Indicated by cathode band  
Mounting Position : Any

### MAXIMUM RATINGS (at $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	SYMBOL	Min.	Typ.	Max.	UNITS
Forward voltage	$I_F=100\text{mA DC}$	$V_F$			1.00	V
Power Dissipation		$P_o$			200	mW
Forward surge current	8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$			4000	mA
Storage temperature		$T_{STG}$	-55		+150	$^\circ\text{C}$
Operating temperature		$T_J$	-55		+150	$^\circ\text{C}$

# MMSZ5221BS thru MMSZ5259BS

## SURFACE MOUNT ZENER DIODES



### ELECTRICAL CHARACTERISTICS (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Part No.	Marking code	Zener voltage	Test current	Zener Impedance			Leakage Current		Surge current
		V <sub>Z</sub> @I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZK</sub>	Z <sub>ZT</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>	I <sub>surge</sub>
		Volts	mA	OHMs	OHMs	mA	μ A	Volts	mA
MMSZ5221BS	C1	2.4	20.0	30	1200	0.25	100	1.0	
MMSZ5222BS	C2	2.5	20.0	30	1250	0.25	100	1.0	
MMSZ5223BS	C3	2.7	20.0	30	1300	0.25	75	1.0	
MMSZ5225BS	C5	3.0	20.0	30	1600	0.25	50	1.0	
MMSZ5226BS	D1	3.3	20.0	28	1600	0.25	25	1.0	
MMSZ5227BS	D2	3.6	20.0	24	1700	0.25	15	1.0	
MMSZ5228BS	D3	3.9	20.0	23	1900	0.25	10	1.0	
MMSZ5229BS	D4	4.3	20.0	22	2000	0.25	5.0	1.0	
MMSZ5230BS	D5	4.7	20.0	19	1900	0.25	5.0	2.0	
MMSZ5231BS	E1	5.1	20.0	17	1600	0.25	5.0	2.0	
MMSZ5232BS	E2	5.6	20.0	11	1600	0.25	5.0	3.0	
MMSZ5234BS	E4	6.2	20.0	7	1000	0.25	5.0	4.0	
MMSZ5235BS	E5	6.8	20.0	5	750	0.25	3.0	5.0	
MMSZ5236BS	F1	7.5	20.0	6	500	0.25	3.0	6.0	
MMSZ5237BS	F2	8.2	20.0	8	500	0.25	3.0	6.0	
MMSZ5239BS	F4	9.1	20.0	10	600	0.25	3.0	6.5	
MMSZ5240BS	F5	10	20.0	17	600	0.25	3.0	8.0	
MMSZ5241BS	H1	11	20.0	22	600	0.25	3.0	8.4	
MMSZ5242BS	H2	12	20.0	30	600	0.25	2.0	9.1	
MMSZ5243BS	H3	13	9.5	13	600	0.25	1.0	9.9	
MMSZ5245BS	H5	15	8.5	16	600	0.25	0.5	11	
MMSZ5246BS	J1	16	7.8	17	600	0.25	0.1	12	
MMSZ5248BS	J3	18	7.0	21	600	0.25	0.1	14	
MMSZ5250BS	J5	20	6.2	25	600	0.25	0.1	15	
MMSZ5251BS	K1	22	5.6	29	600	0.25	0.1	17	
MMSZ5252BS	K2	24	5.2	33	600	0.25	0.1	18	
MMSZ5254BS	K4	27	5.0	41	600	0.25	0.1	21	
MMSZ5255BS	K5	28	4.5	44	600	0.25	0.1	21	
MMSZ5256BS	M1	30	4.2	49	600	0.25	0.1	23	
MMSZ5257BS	M2	33	3.8	58	700	0.25	0.1	25	
MMSZ5258BS	M3	36	3.4	70	700	0.25	0.1	27	
MMSZ5259BS	M4	39	3.2	80	800	0.25	0.1	30	

NOTE : 5% tolerance of Zener voltage