

MMXZ5221 THRU MMXZ5281

Features

- Surface mount application
- Wide Voltage Range Available
- Small Outline Package For Space Saving
- Metallurgically bonded construction available as dash one.

Mechanical Data

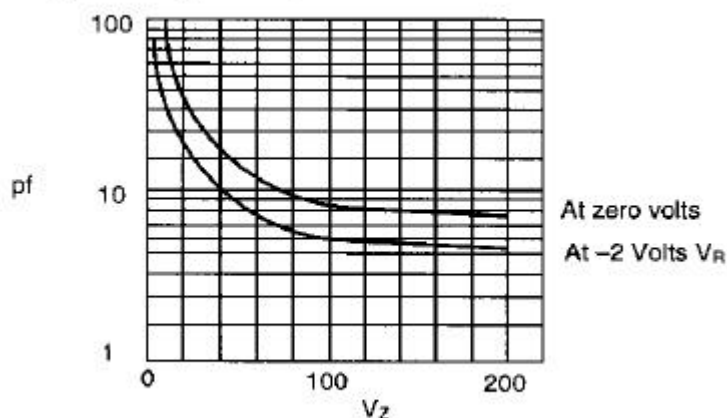
- Case: SOD-323 Molded Plastic
- Terminals: solderable for high temperature 250°C for 10 seconds
- Power Derating: 6.7mW/°C above 75°C
- Mounting Position: Any
- Storage & Operating Temperature: -55°C to +150°C

Maximum Ratings @ 25°C Unless Otherwise Specified

Zener Current	I _F	See Table 1	mA
Maximum Forward Voltage	V _F	1.1	V
Power Dissipation (See Curve)	P _(AV)	500	mWatt
Thermal Resistance	R	100	°C/W

NOTES: 1. Forward current @ 200 mA.

Figure 1 - Typical Capacitance



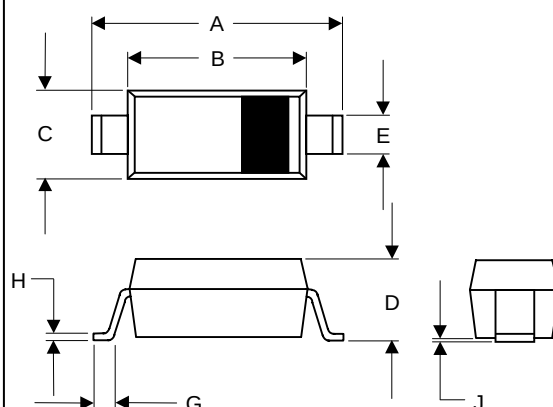
Typical Capacitance (pf) – versus – Zener voltage (V_Z)

500 mW

Zener Diodes

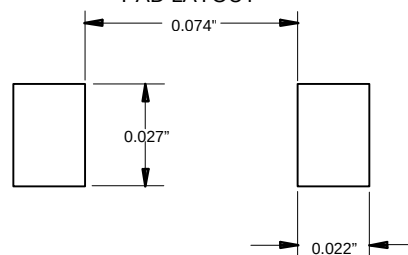
2.4 to 200 Volts

SOD323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



MMXZ5221 thru MMXZ5281

Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC PART NUMBER	NORMAL ZENER VOLTAGE Vz@ Izt	TEST CURRENT Izt	MAXIMUM ZENER IMPEDANCE 'B' SUFFIX ONLY		MAXIMUM REVERSE LEAKAGE CURRENT		MAXIMUM ZENER VOLTAGE TEMP COEFFICIENT 'B' SUFFIX ONLY
			Zzt @ Izt	Zzk@Izk=0.25mA	Ir @ Vr	Vr	
	VOLTS	mA	OHMS	OHMS	uA	VOLTS	%/°C
MMXZ5221	2.4	20	30	1200	100	1.0	-0.085
MMXZ5222	2.5	20	30	1250	100	1.0	-0.085
MMXZ5223	2.7	20	30	1300	75	1.0	-0.080
MMXZ5224	2.8	20	30	1400	75	1.0	-0.080
MMXZ5225	3.0	20	29	1600	50	1.0	-0.075
MMXZ5226	3.3	20	28	1600	25	1.0	-0.070
MMXZ5227	3.6	20	24	1700	15	1.0	-0.065
MMXZ5228	3.9	20	23	1900	10	1.0	-0.060
MMXZ5229	4.3	20	22	2000	5.0	1.0	±0.055
MMXZ5230	4.7	20	19	1900	5.0	2.0	±0.030
MMXZ5231	5.1	20	17	1600	5.0	2.0	±0.030
MMXZ5232	5.6	20	11	1600	5.0	3.0	+0.038
MMXZ5233	6.0	20	7.0	1600	5.0	3.5	+0.038
MMXZ5234	6.2	20	7.0	1000	5.0	4.0	+0.045
MMXZ5235	6.8	20	5.0	750	3.0	5.0	+0.050
MMXZ5236	7.5	20	6.0	500	3.0	6.0	+0.058
MMXZ5237	8.2	20	8.0	500	3.0	6.5	+0.062
MMXZ5238	8.7	20	8.0	600	3.0	6.5	+0.065
MMXZ5239	9.1	20	10	600	3.0	7.0	+0.068
MMXZ5240	10	20	17	600	3.0	8.0	+0.075
MMXZ5241	11	20	22	600	2.0	8.4	+0.076
MMXZ5242	12	20	30	600	1.0	9.1	+0.077
MMXZ5243	13	9.5	13	600	0.5	9.9	+0.079
MMXZ5244	14	9.0	15	600	0.1	10	+0.082
MMXZ5245	15	8.5	16	600	0.1	11	+0.082
MMXZ5246	16	7.8	17	600	0.1	12	+0.083
MMXZ5247	17	7.4	19	600	0.1	13	+0.084
MMXZ5248	18	7.0	21	600	0.1	14	+0.085
MMXZ5249	19	6.6	23	600	0.1	14	+0.086
MMXZ5250	20	6.2	25	600	0.1	15	+0.086
MMXZ5251	22	5.6	29	600	0.1	17	+0.087
MMXZ5252	24	5.2	33	600	0.1	18	+0.088
MMXZ5253	25	5.0	35	600	0.1	19	+0.089
MMXZ5254	27	4.6	41	600	0.1	21	+0.090
MMXZ5255	28	4.5	44	600	0.1	21	+0.091
MMXZ5256	30	4.2	49	600	0.1	23	+0.091
MMXZ5257	33	3.8	58	700	0.1	25	+0.092
MMXZ5258	36	3.4	70	700	0.1	27	+0.093
MMXZ5259	39	3.2	80	800	0.1	30	+0.094
MMXZ5260	43	3.0	93	900	0.1	33	+0.095
MMXZ5261	47	2.7	105	1000	0.1	36	+0.095
MMXZ5262	51	2.5	125	1100	0.1	39	+0.096
MMXZ5263	56	2.2	150	1300	0.1	43	+0.096
MMXZ5264	60	2.1	170	1400	0.1	46	+0.097

MMXZ5221 thru MMXZ5281

Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC PART NUMBER	NORMAL ZENER VOLTAGE V _Z @ I _{ZT}	TEST CURRENT I _{ZT}	MAXIMUM ZENER IMPEDANCE 'B' SUFFIX ONLY		MAXIMUM REVERSE LEAKAGE CURRENT		MAXIMUM ZENER VOLTAGE TEMP COEFFICIENT 'B' SUFFIX ONLY
			Z _{zt} @ I _{ZT}	Z _{zk} @I _{zk} =0.25mA	I _r @ V _r	V _r	
			OHMS	OHMS	uA	VOLTS	
MMXZ5265	62	2.0	185	1400	0.1	47	+0.097
MMXZ5266	68	1.8	230	1600	0.1	52	+0.097
MMXZ5267	75	1.7	270	1700	0.1	56	+0.098
MMXZ5268	82	1.5	330	2000	0.1	62	+0.098
MMXZ5269	87	1.4	370	2200	0.1	68	+0.099
MMXZ5270	91	1.4	400	2300	0.1	69	+0.099
MMXZ5271	100	1.3	500	2600	0.1	76	+0.110
MMXZ5272	110	1.1	750	3000	0.1	84	+0.110
MMXZ5273	120	1.0	900	4000	0.1	91	+0.110
MMXZ5274	130	0.95	1100	4500	0.1	99	+0.110
MMXZ5275	140	0.90	1300	4500	0.1	106	+0.110
MMXZ5276	150	0.85	1500	5000	0.1	114	+0.110
MMXZ5277	160	0.80	1700	5500	0.1	122	+0.110
MMXZ5278	170	0.74	1900	5500	0.1	129	+0.110
MMXZ5279	180	0.68	2200	6000	0.1	137	+0.110
MMXZ5280	190	0.66	2400	6500	0.1	144	+0.110
MMXZ5281	200	0.65	2500	7000	0.1	152	+0.110

NOTE 1: Table as shown lists type numbers, which indicate a tolerance of $\pm 20\%$ with guaranteed Limits on only V_Z, I_R, and V_F. Devices with guaranteed limits on all six parameters are Indicated by suffix "A" for $\pm 10\%$, "B" for $\pm 5\%$, "C" for $\pm 2\%$, and "D" for $\pm 1\%$ tolerance

NOTE 2: The electrical characteristics are measured after allowing the device to stabilize for 20 seconds.

NOTE 3: Temperature coefficient (α_{VZ}). Test conditions for temperature coefficient are as follows:

- I_{ZT} = 7.5mA, T₁ = 25°C
T₂ = 125°C (MMXZ5221 thru MMXZ5242)
- I_{ZT} = Rated I_{ZT}, T₁ = 25°C,
T₂ = 125°C (MMXZ5243 thru MMXZ5281)

Device to be temperature stabilized with current applied prior to reading breakdown voltage

At the specified ambient temperature.

MMXZ5221 thru MMXZ5281

