

MMSZ5221B~MMSZ5267B

ZENER DIODES

VOLTAGE 2.4 to 75 Volt

POWER

500 mWatt



SOD-123

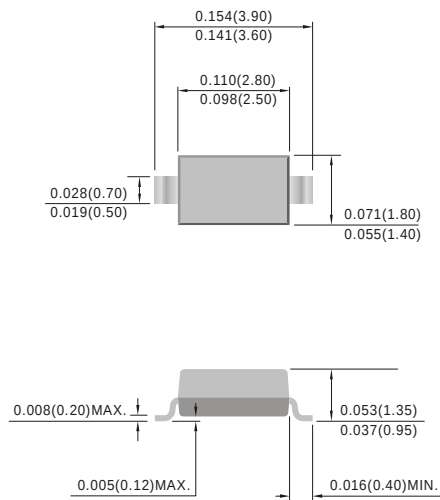
Unit : inch(mm)

FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

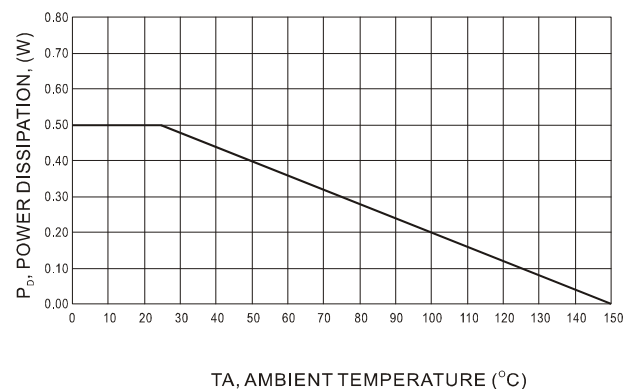
- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounce, 0.0103 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Value	Unit
Total Power Dissipation on FR-5 Board ⁽¹⁾	P_D	500	mW
Thermal Resistance Junction to Ambient Air ⁽¹⁾	$R_{\theta JA}$	305	°C/W
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Ratings and Characteristic curves



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Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted, $V_F=0.9\text{V Max}@ I_F=10\text{mA}$)

Device	Device Marking (2)	Zener Voltage Range (1)				Maximum Zener Impedance(3)			Maximum Reverse Current		Typical Temperature Coefficient @ I _{ZT} mV/°C		Test Current I _{ZTC}
		V _Z @ I _{ZT}			@ I _{ZT}	Z _{TT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{zk}	I _R	@ V _R			
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V	Min	Max	
MMSZ5221B	WX	2.4	2.28	2.52	5	100	600	1.0	50	1.0	-3.5	0	5
MMSZ5223B	W1	2.7	2.57	2.84	5	100	600	1.0	20	1.0	-3.5	0	5
MMSZ5225B	W2	3.0	2.85	3.15	5	95	600	1.0	10	1.0	-3.5	0	5
MMSZ5226B	W3	3.3	3.14	3.47	5	95	600	1.0	5.0	1.0	-3.5	0	5
MMSZ5227B	W4	3.6	3.42	3.78	5	90	600	1.0	5.0	1.0	-3.5	0	5
MMSZ5228B	W5	3.9	3.71	4.1	5	90	600	1.0	3.0	1.0	-3.5	0	5
MMSZ5229B	W6	4.3	4.09	4.52	5	90	600	1.0	3.0	1.0	-3.5	0	5
MMSZ5230B	W7	4.7	4.47	4.94	5	80	500	1.0	3.0	2.0	-3.5	0.2	5
MMSZ5231B	W8	5.1	4.85	5.36	5	60	480	1.0	2.0	2.0	-2.7	1.2	5
MMSZ5232B	W9	5.6	5.32	5.88	5	40	400	1.0	1.0	2.0	-2.0	2.5	5
MMSZ5234B	WA	6.2	5.89	6.51	5	10	150	1.0	3.0	4.0	0.4	3.7	5
MMSZ5235B	WB	6.8	6.46	7.14	5	15	80	1.0	2.0	4.0	1.2	4.5	5
MMSZ5236B	WC	7.5	7.13	7.88	5	15	80	1.0	1.0	5.0	2.5	5.3	5
MMSZ5237B	WD	8.2	7.79	8.61	5	15	80	1.0	0.7	5.0	3.2	6.2	5
MMSZ5239B	WE	9.1	8.65	9.56	5	15	100	1.0	0.5	6.0	3.8	7.0	5
MMSZ5240B	WF	10	9.5	10.5	5	20	150	1.0	0.2	7.0	4.5	8.0	5
MMSZ5241B	WG	11	10.45	11.55	5	20	150	1.0	0.1	8.0	5.4	9.0	5
MMSZ5242B	WH	12	11.4	12.6	5	25	150	1.0	0.1	8.0	6.0	10	5
MMSZ5243B	WI	13	12.35	13.65	5	30	170	1.0	0.1	8.0	7.0	11.0	5
MMSZ5245B	WJ	15	14.25	15.75	5	30	200	1.0	0.1	10.5	9.2	13.0	5
MMSZ5246B	WK	16	15.2	16.8	5	40	200	1.0	0.1	11.2	10.4	14.0	5
MMSZ5248B	WL	18	17.1	18.9	5	45	225	1.0	0.1	12.6	12.4	16.0	5
MMSZ5250B	WM	20	19	21	5	55	225	1.0	0.1	14.0	14.4	18.0	5
MMSZ5251B	WN	22	20.9	23.1	5	55	250	1.0	0.1	15.4	16.4	20.0	5
MMSZ5252B	WO	24	22.8	25.2	5	70	250	1.0	0.1	16.8	18.4	22.0	5
MMSZ5254B	WP	27	25.65	28.35	2	80	300	0.5	0.1	18.9	21.4	25.3	2
MMSZ5256B	WQ	30	28.5	31.5	2	80	300	0.5	0.1	21.0	24.4	29.4	2
MMSZ5257B	WR	33	31.35	34.65	2	80	325	0.5	0.1	23.1	27.4	33.4	2
MMSZ5258B	WS	36	34.2	37.8	2	90	350	0.5	0.1	25.2	30.4	37.4	2
MMSZ5259B	WT	39	37.05	40.95	2	130	350	0.5	0.1	27.3	33.4	41.2	2
MMSZ5260B	WU	43	40.85	45.15	2	100	700	1.0	0.1	32	10.0	12.0	5
MMSZ5261B	WV	47	44.65	49.35	2	100	750	1.0	0.1	35	10.0	12.0	5
MMSZ5262B	WW	51	48.45	53.55	2	125	750	1.0	0.1	38	10.0	12.0	5
MMSZ5263B	XW	56	52.00	60.00	2	135	750	1.0	0.1	39	10.0	12.0	5
MMSZ5265B	6E	62	58.00	66.00	2	200	1000	1.0	0.2	47	10.0	12.0	5
MMSZ5266B	6F	68	64.00	72.00	2	250	1000	1.0	0.2	52	10.0	12.0	5
MMSZ5267B	6H	75	70.00	79.00	2	300	1000	1.0	0.2	57	10.0	12.0	5

Note:

1. Tested with pulses, period = 5ms, pulse width = 300us.
2. When provided, otherwise, parts are provided with date code only, and type number identifications appears on reel only.
3. $f=1\text{KHz}$.

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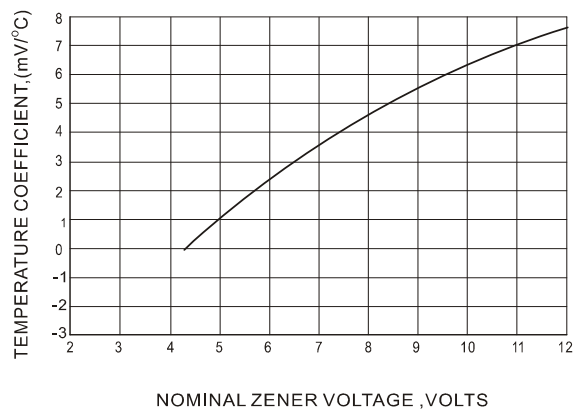


Fig.1 TEMPERATURE COEFFICIENTS

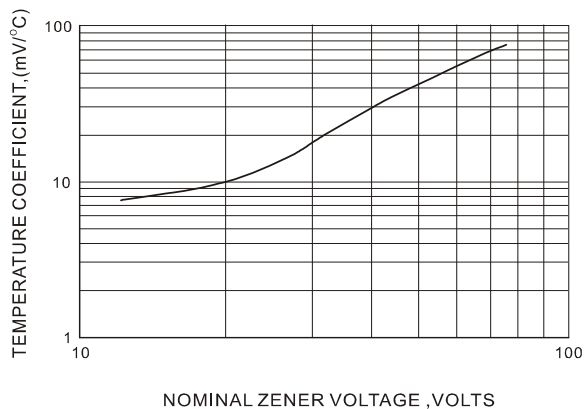


Fig.2 TEMPERATURE COEFFICIENTS

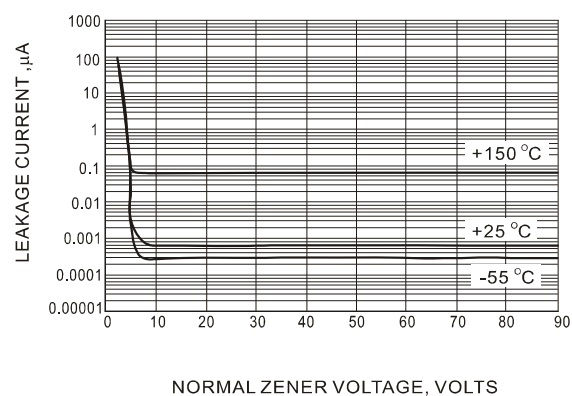


Fig.3 TYPICAL LEAKAGE CURRENT

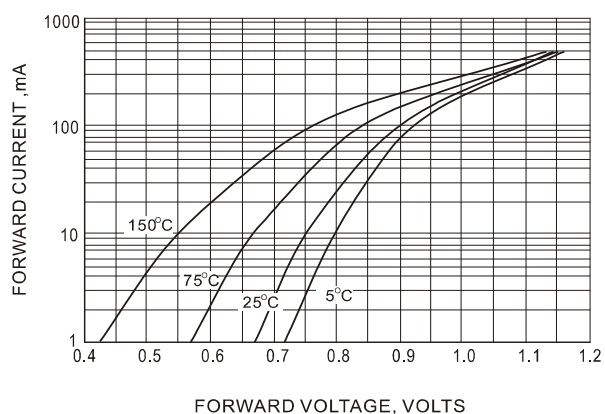


Fig.4 TYPICAL FORWARD VOLTAGE

The cruve graph is for reference only, can't be the basis for judgment

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