

MM5Z2V0H~MM5Z75H

Zener Voltage Regulators

Lead free product

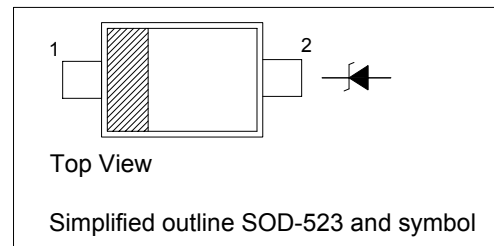
Halogen - free type

Features

- Standard Zener Breakdown Voltage Range
2.0 V to 75 V
- Steady State Power Rating of 200 mW

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_j = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Total Device Dissipation FR-5 Board at $T_A = 25^\circ\text{C}$	P_{tot}	200	mW
Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_{\text{amb}} = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

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Type	Marking Code	Zener Voltage ¹⁾				Zener Impedance			Leakage Current		θV_Z (mV/k) @ I_{ZT}		C @ $V_R = 0$ f = 1 MHz
		V_{ZT} (V)			@ I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	I_R	@ V_R			
		Min.	Nom.	Max.	mA	Ω	Ω	mA	μA	V	Min.	Max.	pF
MM5Z2V0H	RD	1.8	2.0	2.15	5	100	-	-	120	0.5	-	-	-
MM5Z2V2H	RE	2.08	2.2	2.33	5	100	-	-	120	0.7	-	-	-
MM5Z2V4H	Z7	2.2	2.4	2.6	5	100	1000	1	120	1	-3.5	0	450
MM5Z2V7H	A8	2.5	2.7	2.9	5	100	1000	1	120	1	-3.5	0	450
MM5Z3V0H	B8	2.8	3.0	3.2	5	100	1000	1	50	1	-3.5	0	450
MM5Z3V3H	C8	3.1	3.3	3.5	5	95	1000	1	20	1	-3.5	0	450
MM5Z3V6H	D8	3.4	3.6	3.8	5	90	1000	1	10	1	-3.5	0	450
MM5Z3V9H	E8	3.7	3.9	4.1	5	90	1000	1	5	1	-3.5	-2.5	450
MM5Z4V3H	F8	4	4.3	4.6	5	90	1000	1	5	1	-3.5	0	450
MM5Z4V7H	G8	4.4	4.7	5	5	80	800	1	2	1	-3.5	0.2	260
MM5Z5V1H	H8	4.8	5.1	5.4	5	60	500	1	2	1.5	-2.7	1.2	225
MM5Z5V6H	I8	5.2	5.6	6	5	40	200	1	1	2.5	-2.0	2.5	200
MM5Z6V2H	J8	5.8	6.2	6.6	5	10	100	1	1	3	0.4	3.7	185
MM5Z6V8H	K8	6.4	6.8	7.2	5	15	160	1	0.5	3.5	1.2	4.5	155
MM5Z7V5H	L8	7	7.5	7.9	5	15	160	1	0.5	4	2.5	5.3	140
MM5Z8V2H	M8	7.7	8.2	8.7	5	15	160	1	0.5	5	3.2	6.2	135
MM5Z9V1H	N8	8.5	9.1	9.6	5	15	160	1	0.5	6	3.8	7.0	130
MM5Z10H	O8	9.4	10	10.6	5	20	160	1	0.1	7	4.5	8.0	130
MM5Z11H	P8	10.4	11	11.6	5	20	160	1	0.1	8	5.4	9.0	130
MM5Z12H	Q8	11.4	12	12.7	5	25	80	1	0.1	9	6.0	10	130
MM5Z13H	R8	12.4	13.25	14.1	5	30	80	1	0.1	10	7.0	11	120
MM5Z15H	S8	14.3	15	15.8	5	30	80	1	0.1	11	9.2	13	110
MM5Z16H	T8	15.3	16.2	17.1	2	40	80	1	0.1	12	10.4	14	105
MM5Z18H	U8	16.8	18	19.1	2	45	80	1	0.1	13	12.4	16	100
MM5Z20H	V8	18.8	20	21.2	2	55	100	1	0.1	15	14.4	18	85
MM5Z22H	W8	20.8	22	23.3	2	55	100	1	0.1	17	16.4	20	85
MM5Z24H	X8	22.8	24.2	25.6	2	70	120	1	0.1	19	18.4	22	80
MM5Z27H	Y8	25.1	27	28.9	2	80	300	1	0.1	21	21.4	25.3	70
MM5Z30H	Z8	28	30	32	2	80	300	1	0.1	23	24.4	29.4	70
MM5Z33H	A9	31	33	35	2	80	300	1	0.1	25	27.4	33.4	70
MM5Z36H	B9	34	36	38	2	90	500	1	0.1	27	30.4	37.4	70
MM5Z39H	C9	37	39	41	2	130	500	1	2	30	33.4	41.2	45
MM5Z43H	D9	40	43	46	1	150	500	1	2	33	37.6	46.6	40
MM5Z47H	E9	44	47	50	1	170	500	1	2	36	42.0	51.8	40
MM5Z51H	F9	48	51	54	1	180	500	1	1	39	46.6	57.2	40
MM5Z56H	G9	52	56	60	1	200	500	1	1	43	52.2	63.8	40
MM5Z62H	H9	58	62	66	1	215	500	1	0.2	47	58.8	71.6	35
MM5Z68H	I9	64	68	72	1	240	500	1	0.2	52	65.6	79.8	35
MM5Z75H	J9	70	75	79	1	255	500	1	0.2	57	73.4	88.6	35

¹⁾ Tested with pulses $t_p = 20$ ms.

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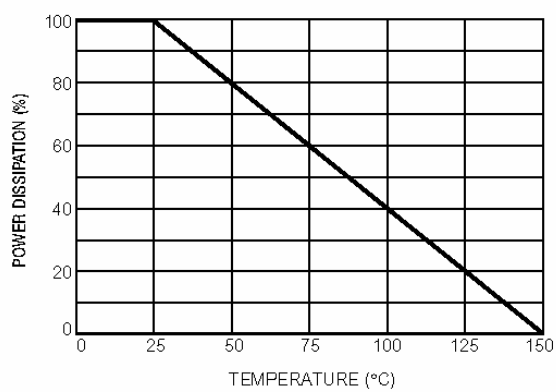


Figure 2. Steady State Power Derating