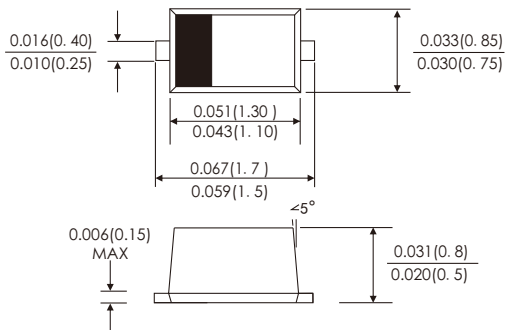


### FEATURES

- Standard Zener breakdown voltage range-2.0V to 75V
- Steady State Power Rating of 300 mW
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC



### SOD-523FL



Dimensions in inches and (millimeters)

### MECHANICAL DATA

- Case: SOD-523FL
- Weight: 0.002 grams

### ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) (TA=25°C)

	Symbols	Value	Units
Zener current see table "Characteristics"			
Total Device Dissipation FR-5 Board at TA=25°C	P <sub>tot</sub>	300	mW
Junction and Storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (TA=25°C)

	Symbols	Min	Typ	Max	Units
Forward voltage at I <sub>F</sub> =10mA	V <sub>F</sub>			0.9	V

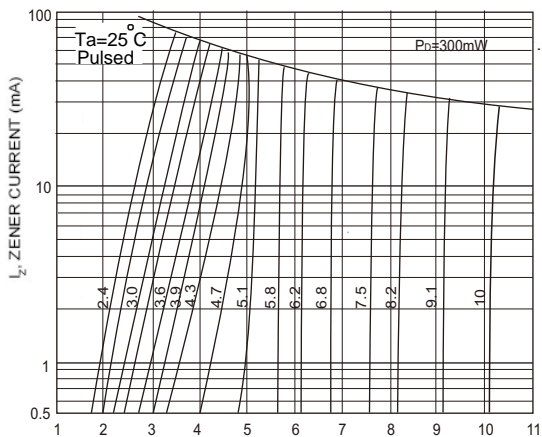
# MM5Z2V0 ... MM5Z75

Type	Zener Voltage <sup>1)</sup>				Zener Impedance			Leakage Current		$\theta_{Vz}$ (mV/k) @ $I_{ZT}$		$C$ @ $V_R=0$ $f=1\text{MHz}$
	$V_{ZT}$ (V)			@ $I_{ZT}$	$Z_{ZT}$	$Z_{ZK}$	at $I_{ZK}$	$I_R$	@ $V_R$	Min	Max	pF
	Min	Nom	Max	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V			
MM5Z2V0	1.8	2.0	2.15	5	100	-	-	120	0.5	-	-	-
MM5Z2V2	2.08	2.2	2.33	5	100	-	-	120	0.7	-	-	-
MM5Z2V4	2.2	2.4	2.6	5	100	1,000	1	120	1	-3.5		450
MM5Z2V7	2.5	2.7	2.9	5	100	1,000	1	120	1	-3.5		450
MM5Z3V0	2.8	3.0	3.2	5	100	1,000	1	50	1	-3.5		450
MM5Z3V3	3.1	3.3	3.5	5	95	1,000	1	20	1	-3.5		450
MM5Z3V6	3.4	3.6	3.8	5	90	1,000	1	10	1	-3.5		450
MM5Z3V9	3.7	3.9	4.1	5	90	1,000	1	5	1	-3.5	-2.5	450
MM5Z4V3	4	4.3	4.6	5	90	1,000	1	5	1	-3.5		450
MM5Z4V7	4.4	4.7	5	5	80	800	1	2	1	-3.5	0.2	260
MM5Z5V1	4.8	5.1	5.4	5	60	500	1	2	1.5	-2.7	1.2	225
MM5Z5V6	5.2	5.6	6	5	40	200	1	1	2.5	-2.0	2.5	200
MM5Z6V2	5.8	6.2	6.6	5	10	100	1	1	3	0.4	3.7	185
MM5Z6V8	6.4	6.8	7.2	5	15	160	1	0.5	3.5	1.2	4.5	155
MM5Z7V5	7	7.5	7.9	5	15	160	1	0.5	4	2.5	5.3	140
MM5Z8V2	7.7	8.2	8.7	5	15	160	1	0.5	5	3.2	6.2	135
MM5Z9V1	8.5	9.1	9.6	5	15	160	1	0.5	6	3.8	7.0	130
MM5Z10	9.4	10	10.6	5	20	160	1	0.1	7	4.5	8.0	130
MM5Z11	10.4	11	11.6	5	20	160	1	0.1	8	5.4	9.0	130
MM5Z12	11.4	12	12.7	5	25	80	1	0.1	9	6.0	10	130
MM5Z13	12.4	13.25	14.1	5	30	80	1	0.1	10	7.0	11	120
MM5Z15	14.3	15	15.8	5	30	80	1	0.1	11	9.2	13	110
MM5Z16	15.3	16.2	17.1	2	40	80	1	0.1	12	10.4	14	105
MM5Z18	16.8	18	19.1	2	45	80	1	0.1	13	12.4	16	100
MM5Z20	18.8	20	21.2	2	55	100	1	0.1	15	14.4	18	85
MM5Z22	20.8	22	23.3	2	55	100	1	0.1	17	16.4	20	85
MM5Z24	22.8	24.2	25.6	2	70	120	1	0.1	19	18.4	22	80
MM5Z27	25.1	27	28.9	2	80	300	1	0.1	21	21.4	25.3	70
MM5Z30	28	30	32	2	80	300	1	0.1	23	24.4	29.4	70
MM5Z33	31	33	35	2	80	300	1	0.1	25	27.4	33.4	70
MM5Z36	34	36	38	2	90	500	1	0.1	27	30.4	37.4	70
MM5Z39	37	39	41	2	130	500	1	2	30	33.4	41.2	45
MM5Z43	40	43	46	1	150	500	1	2	33	37.6	46.6	40
MM5Z47	44	47	50	1	170	500	1	2	36	42.0	51.8	40
MM5Z51	48	51	54	1	180	500	1	1	39	46.6	57.2	40
MM5Z56	52	56	60	1	200	500	1	1	43	52.2	63.8	40
MM5Z62	58	62	66	1	215	500	1	0.2	47	58.8	71.6	35
MM5Z68	64	68	72	1	240	500	1	0.2	52	65.6	79.8	35
MM5Z75	70	75	79	1	255	500	1	0.2	57	73.4	88.6	35

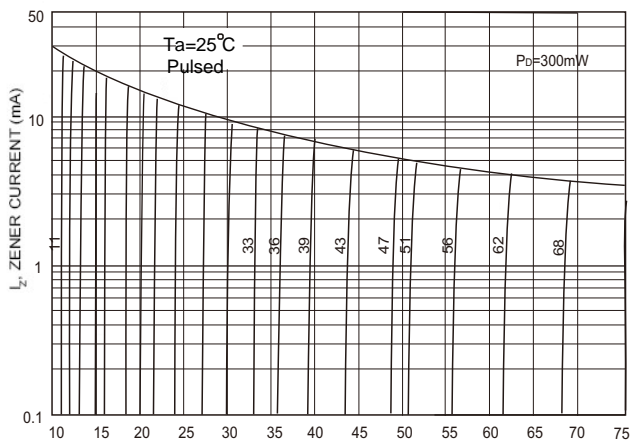
Note 1) Tested with pulse  $t_p=20\text{ms}$ .

# MM5Z2V0 ... MM5Z75

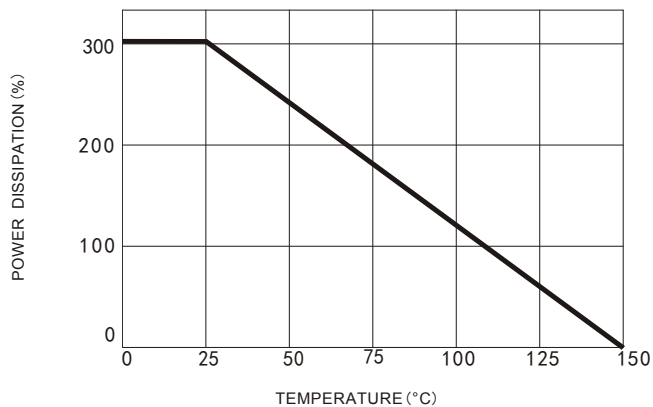
### Zener Characteristics ( $V_z$ Up to 10 V)



### Zener Characteristics (11 V to 75 V)



### Steady State Power Derating



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