

ZENER DIODES

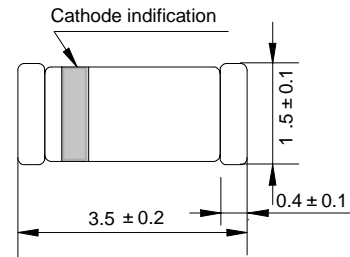
ZMM2V0---ZMM75

FEATURES

- Low cost
- Small size
- Glass sealed

MECHANICAL DATA

- Case: LL34 glass case
- Terminals: solderable per MIL - STD - 202, method 208
- Polarity: color band denotes cathode
- Mounting position: any
- Weight: 0.05 grams



LL-34(SOD-80) Dimensions in millimeters

ABSOLUTE MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_s	- 55 to + 175	°C

1) Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW
Forward Voltage at $I_F = 100 \text{ mA}$	V_F	1	V

1) Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

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Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	VZnom	VZ	at IZT	ZZT	ZZK	at IZK	T _a = 25 °C	T _a = 125 ⁰ °C	at VR	
	(V)	(V)	(mA)	Max. ()	Max. ()	(mA)	Max. (µA)	Max. (µA)	(V)	TKvz (%/K)
ZMM2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
ZMM2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
ZMM2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
ZMM2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
ZMM3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
ZMM3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
ZMM3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
ZMM3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
ZMM4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
ZMM4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
ZMM5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
ZMM5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
ZMM6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
ZMM6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
ZMM7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
ZMM8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
ZMM9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
ZMM10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
ZMM11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
ZMM12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
ZMM13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
ZMM15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
ZMM16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
ZMM18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
ZMM20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
ZMM22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
ZMM24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
ZMM27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
ZMM30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
ZMM33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
ZMM36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
ZMM39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
ZMM43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
ZMM47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
ZMM51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
ZMM56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
ZMM62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
ZMM68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
ZMM75	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

1) Tested with pulses tp = 20 ms.

2) The ZMM1 is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode

ZMM2V0---ZMM75 Typical Characteristics

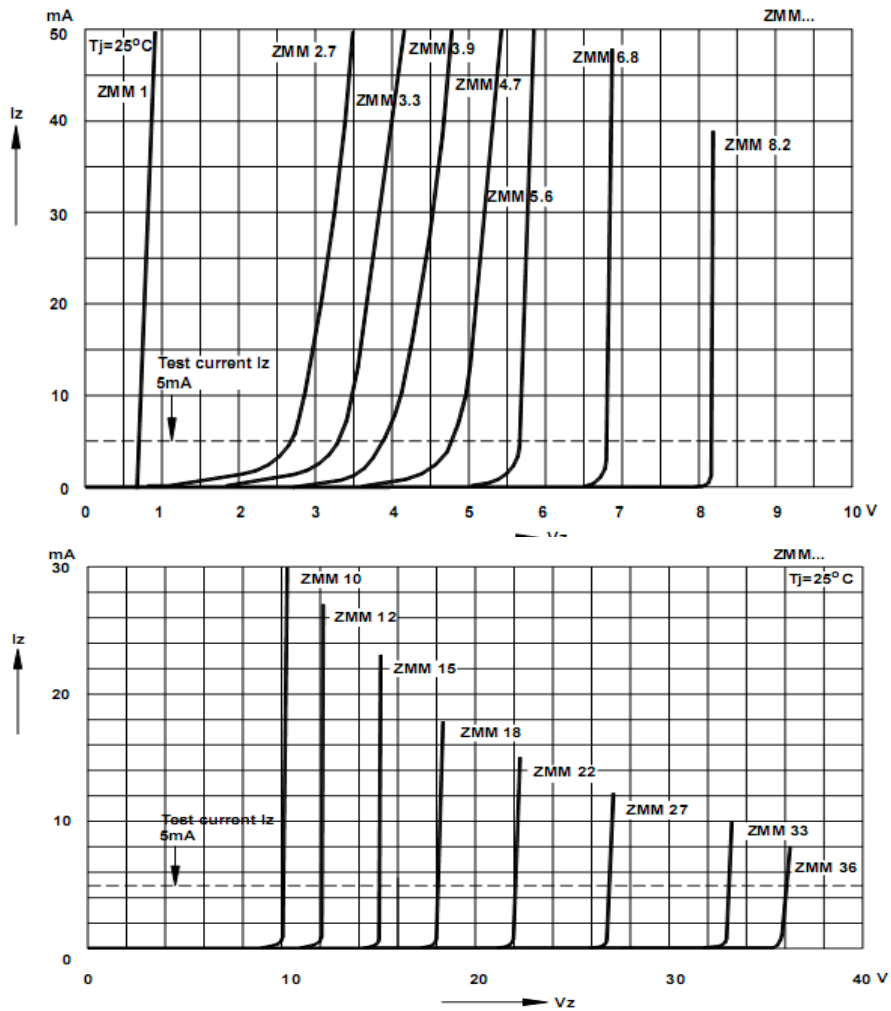


FIG.2- POWER ,TEMPERATURE DERATING CURVE

