

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

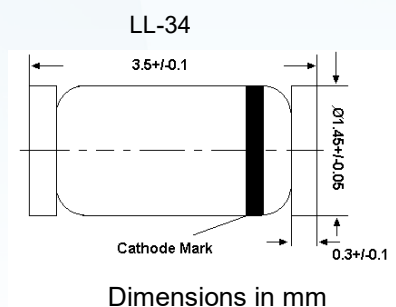
▶ Domestic	Part Number	ZMM Series
▶ Overseas	Part Number	ZMM Series
▶ Equivalent	Part Number	ZMM Series

EV is the abbreviation of name EVVO

Surface Mount Silicon Planar Zener Diodes

Features

- Glass case MiniMELF
- Maximum power dissipation 500 mW



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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175	$^{\circ}\text{C}$

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta\text{JA}}$	300	$^{\circ}\text{C/W}$

¹⁾ Valid provided that electrodes are kept at ambient temperature.

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$ ($V_F = 1\text{ V max. at } I_F = 100\text{ mA}$)

Type	Zener Voltage Range ¹⁾			Maximum Dynamic Resistance				Maximum Reverse Current	
	V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
	V	V	mA	Ω	mA	Ω	mA	μA	V
ZMM2V0	2.0	1.8...2.15	5	85	5	600	1	100	1
ZMM2V2	2.2	2.08...2.33	5	85	5	600	1	75	1
ZMM2V4	2.4	2.28...2.56	5	85	5	600	1	50	1
ZMM2V7	2.7	2.5...2.9	5	85	5	600	1	10	1
ZMM3V0	3.0	2.8...3.2	5	85	5	600	1	4	1
ZMM3V3	3.3	3.1...3.5	5	85	5	600	1	2	1
ZMM3V6	3.6	3.4...3.8	5	85	5	600	1	2	1
ZMM3V9	3.9	3.7...4.1	5	85	5	600	1	2	1
ZMM4V3	4.3	4...4.6	5	75	5	600	1	1	1
ZMM4V7	4.7	4.4...5	5	60	5	600	1	0.5	1
ZMM5V1	5.1	4.8...5.4	5	35	5	550	1	0.1	1
ZMM5V6	5.6	5.2...6	5	25	5	450	1	0.1	1
ZMM6V2	6.2	5.8...6.6	5	10	5	200	1	0.1	2
ZMM6V8	6.8	6.4...7.2	5	8	5	150	1	0.1	3
ZMM7V5	7.5	7...7.9	5	7	5	50	1	0.1	5
ZMM8V2	8.2	7.7...8.7	5	7	5	50	1	0.1	6.2
ZMM9V1	9.1	8.5...9.6	5	10	5	50	1	0.1	6.8
ZMM10	10	9.4...10.6	5	15	5	70	1	0.1	7.5
ZMM11	11	10.4...11.6	5	20	5	70	1	0.1	8.2
ZMM12	12	11.4...12.7	5	20	5	90	1	0.1	9.1
ZMM13	13	12.4...14.1	5	26	5	110	1	0.1	10
ZMM15	15	13.8...15.6	5	30	5	110	1	0.1	11
ZMM16	16	15.3...17.1	5	40	5	170	1	0.1	12
ZMM18	18	16.8...19.1	5	50	5	170	1	0.1	13
ZMM20	20	18.8...21.2	5	55	5	220	1	0.1	15
ZMM22	22	20.8...23.3	5	55	5	220	1	0.1	16
ZMM24	24	22.8...25.6	5	80	5	220	1	0.1	18
ZMM27	27	25.1...28.9	5	80	5	220	1	0.1	20
ZMM30	30	28...32	5	80	5	220	1	0.1	22
ZMM33	33	31...35	5	80	5	220	1	0.1	24
ZMM36	36	34...38	5	80	5	220	1	0.1	27
ZMM39	39	37...41	2.5	90	2.5	500	0.5	0.1	30
ZMM43	43	40...46	2.5	90	2.5	500	0.5	0.1	33
ZMM47	47	44...50	2.5	110	2.5	600	0.5	0.1	36

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

Electrical Characteristics Curves

Fig 1. Zener Characteristics Curve

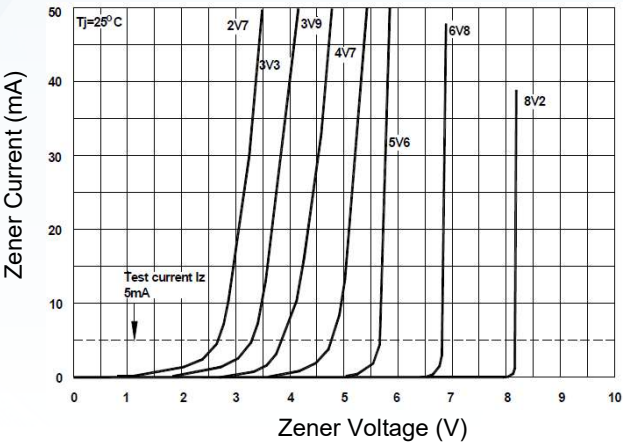


Fig 2. Zener Characteristics Curve

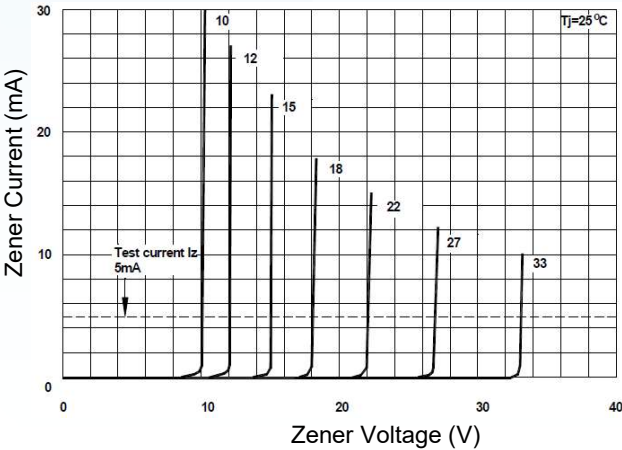
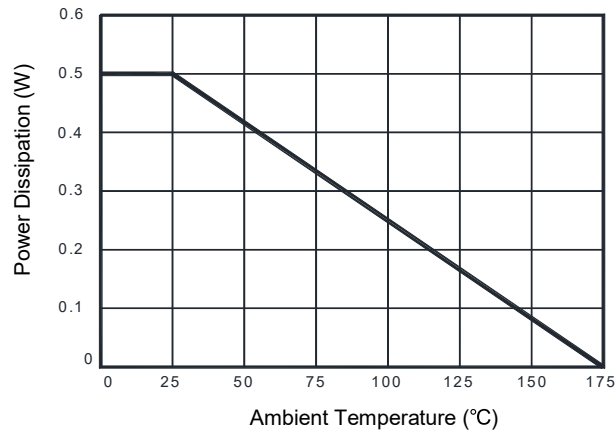


Fig 3. Power Derating Curve



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