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電源管理



顯示驅動



二三極管



LDO穩壓器



觸摸芯片



MOS管



運算放大器



存儲芯片



MCU



串口通信

ZMM3V9

產品規格說明書

ZMM3V9 Silicon Epitaxial Planar Zener Diodes

Features

MiniMELF case especially for automatic insertion. The Zener voltages are graded according to the international E24 standard.

Smaller voltage tolerances and higher Zener voltages are upon request.

These diodes are also available in DO-35 case with the type designation BZX55C...



LL-34

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

Parameter	Symbol	Value	Unit
Power Dissipation ¹⁾	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.

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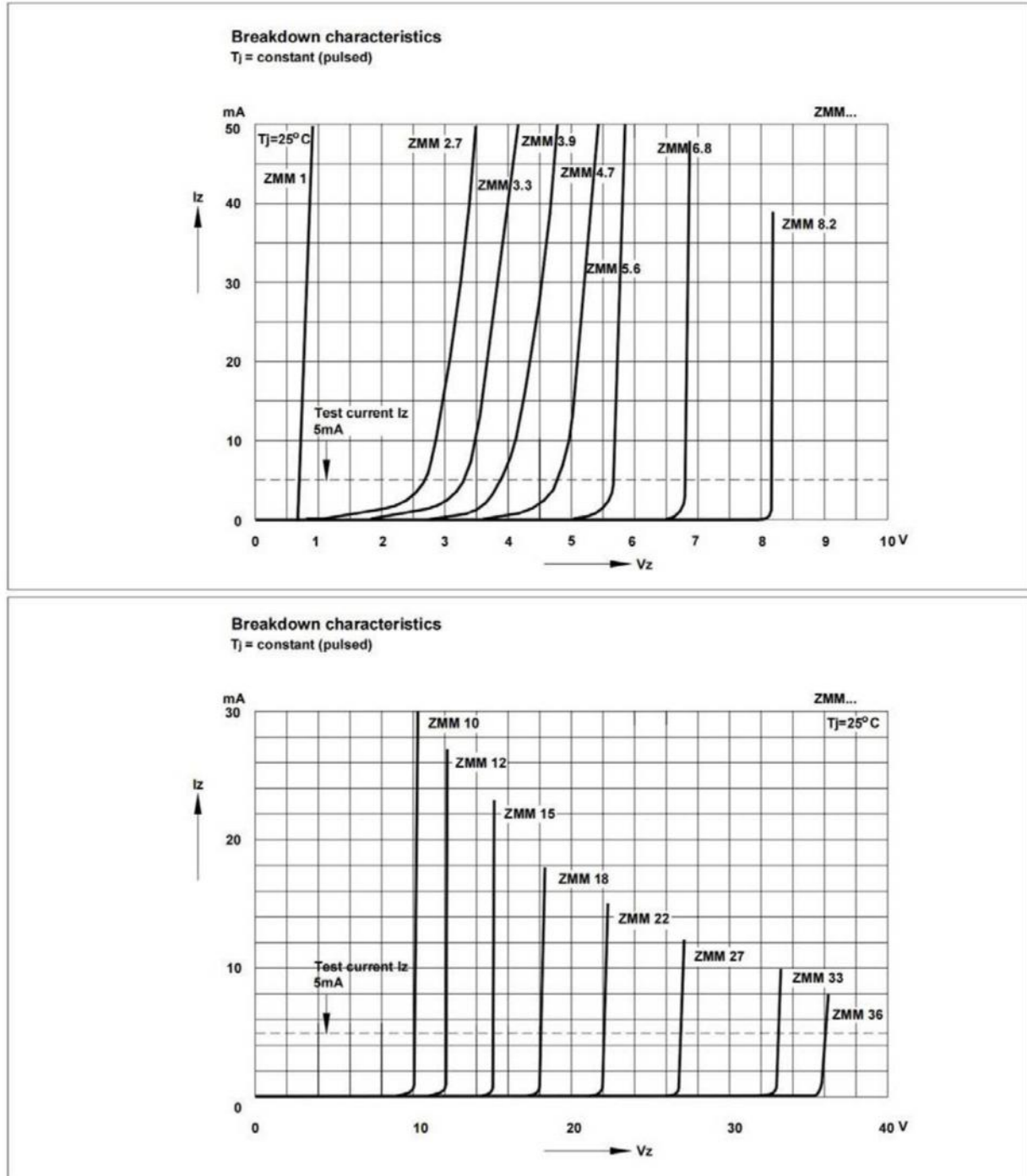
Characteristics at $T_a = 25^\circ\text{C}$

Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK}	at I_{ZK}	$T_a = 25^\circ\text{C}$	$T_a = 125^\circ\text{C}$	at V_R	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	Max. (μA)	(V)	
ZMM1 ²⁾	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
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

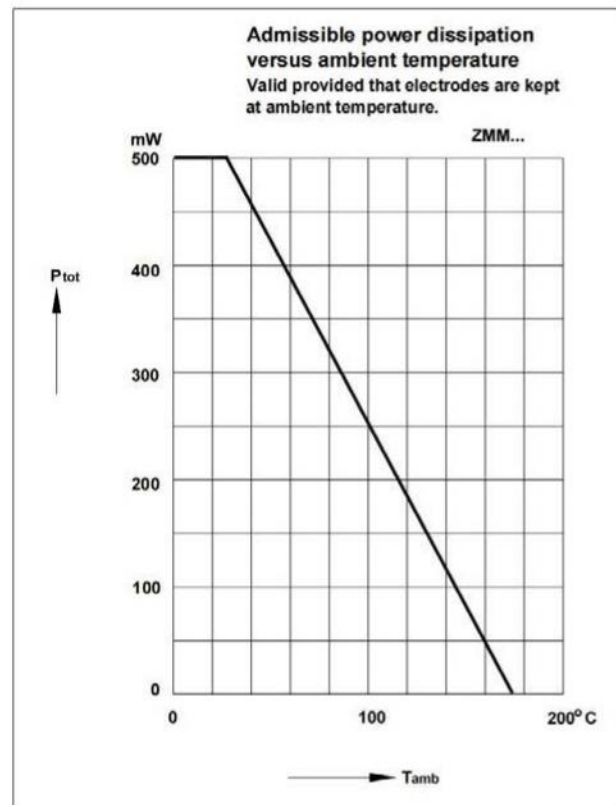
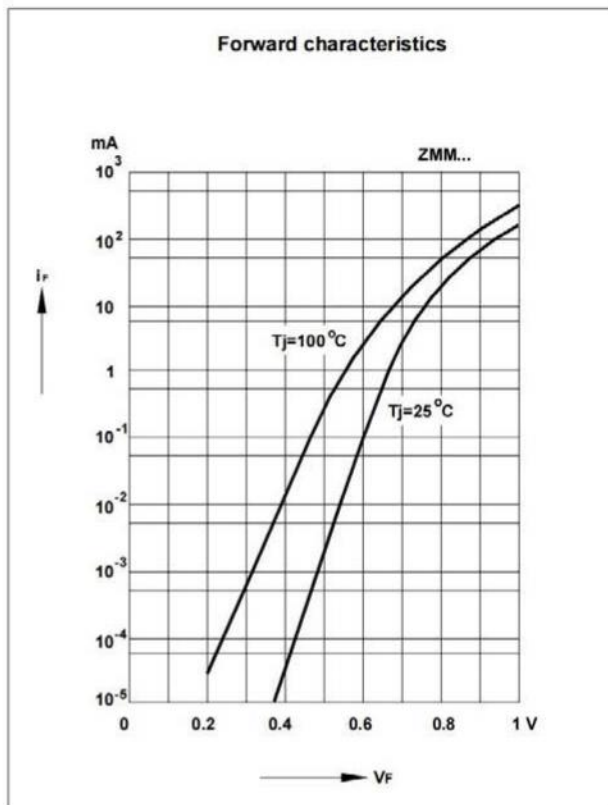
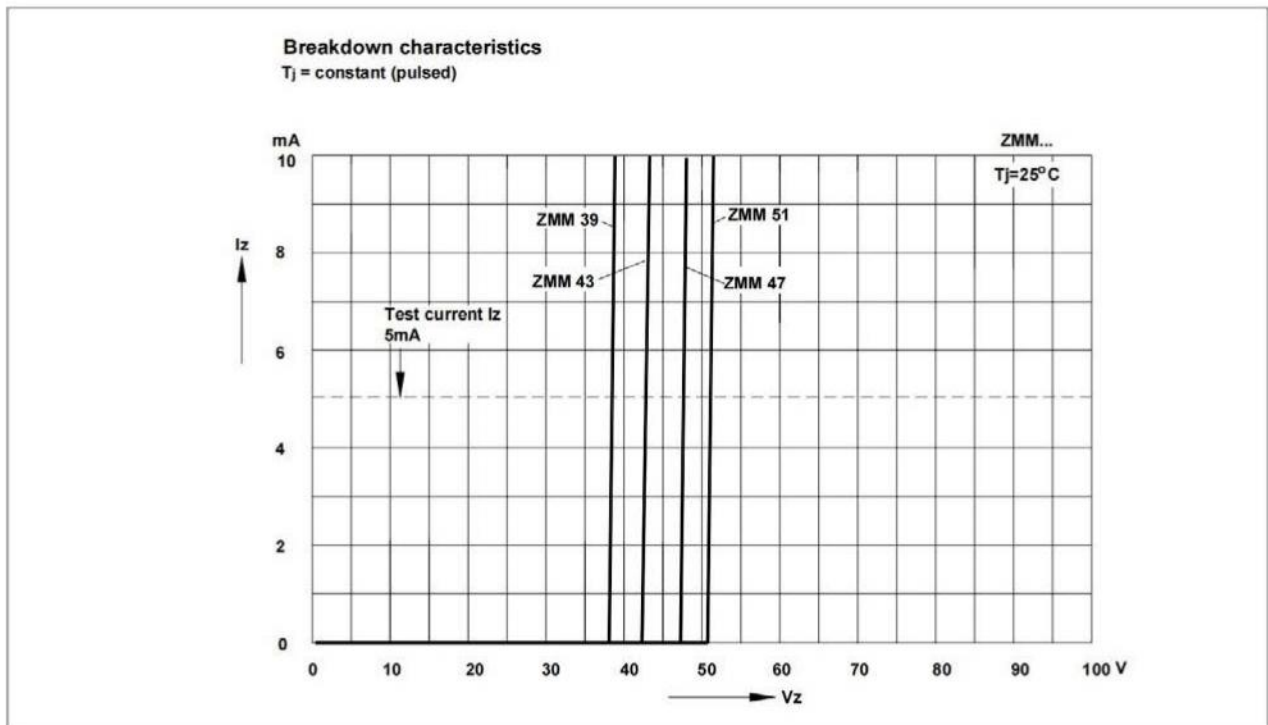
¹⁾ Tested with pulses $t_p = 20$ ms.

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 electrode to the negative pole.

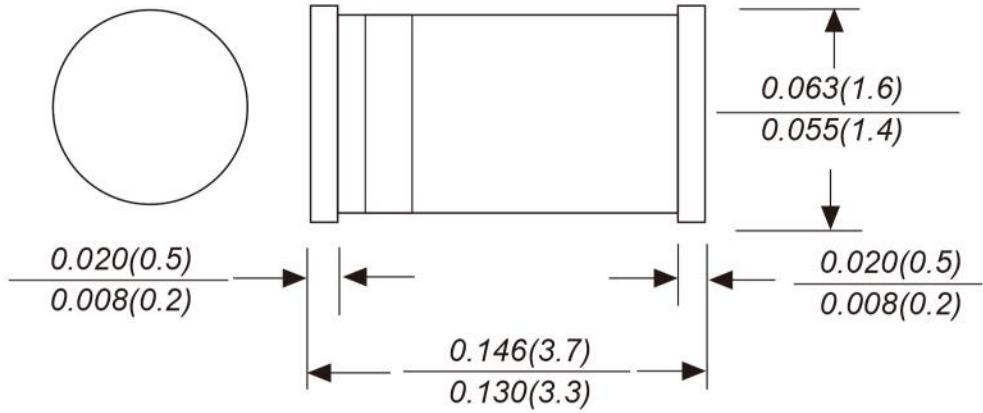
Typical Characteristics



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LL-34 Package Information



Dimensions in inches and (millimeters)