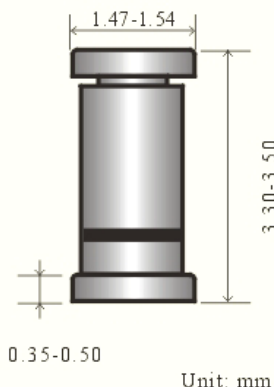




LL-34 GLASS



ZMM Series

**LL-34(Mini-melf)玻璃稳压二极管
LL-34(Mini-melf) Glass Zener Diode****特征 Features**

- 反向漏电小; Low Reverse Leakage
- 齐纳击穿阻抗低; Low Zener Impedance
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: LL-34 玻璃封装 Case: LL-34 Glass Case
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性($T_A = 25^\circ\text{C}$ 除非另有规定)**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
功率消耗 Power Dissipation	Pd	500 ¹⁾	mW
工作结温 Operating junction temperature	Tj	175	$^\circ\text{C}$
存储温度 Storage temperature range	Ts	-55-+175	$^\circ\text{C}$

1) Valid provided that electrodes are kept at ambient temperature

电特性 ($T_A = 25^\circ\text{C}$ 除非另有规定)**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

型号 TYPE	稳压范围 Zener Voltage			反向电流 Reverse Current		动态电阻 Dynamic Resistance	
	Vz(V)		Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZMM 2V0	1.80	2.15	5.0	100	1.0	85	5.0
ZMM 2V2	2.08	2.33	5.0	75	1.0	85	5.0
ZMM 2V4	2.28	2.56	5.0	50	1.0	85	5.0
ZMM 2V7	2.50	2.90	5.0	10	1.0	85	5.0
ZMM 3V0	2.80	3.20	5.0	4	1.0	85	5.0
ZMM 3V3	3.10	3.50	5.0	2	1.0	85	5.0
ZMM 3V6	3.40	3.80	5.0	2	1.0	85	5.0
ZMM 3V9	3.70	4.10	5.0	2	1.0	85	5.0
ZMM 4V3	4.00	4.60	5.0	1	1.0	75	5.0
ZMM4V7	4.40	5.00	5.0	0.5	1.0	60	5.0
ZMM 5V1	4.80	5.40	5.0	0.1	1.0	35	5.0
ZMM 5V6	5.20	6.00	5.0	0.1	1.0	25	5.0
ZMM 6V2	5.80	6.60	5.0	0.1	2.0	10	5.0
ZMM 6V8	6.40	7.20	5.0	0.1	3.0	8	5.0
ZMM 7V5	7.00	7.90	5.0	0.1	5.0	7	5.0
ZMM 8V2	7.70	8.70	5.0	0.1	6.2	7	5.0

ZMM Series

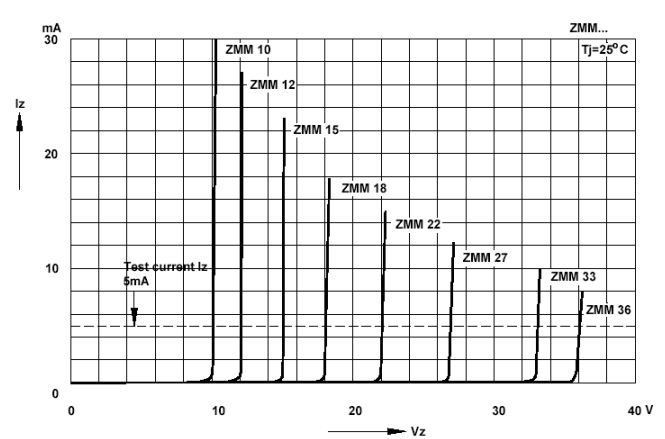
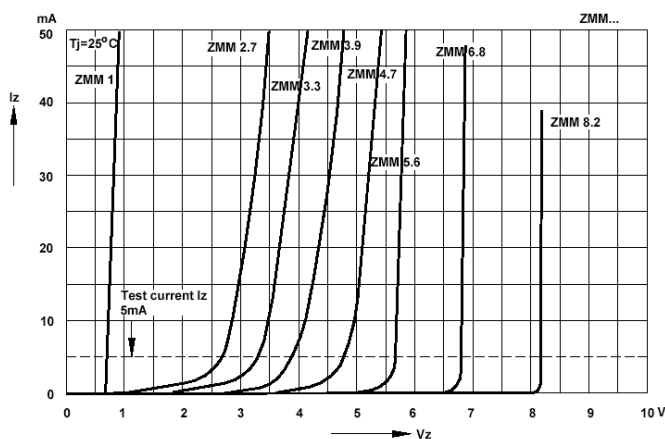
型号 TYPE	稳压范围 Zener Voltage		反向电流 Reverse Current		动态电阻 Dynamic Resistance		
	Vz(V)		Test Condition	Test Condition	rd(Ω)	Test Condition	
	Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZMM 9V1	8.50	9.60	5.0	0.1	6.8	10	5.0
ZMM 10	9.40	10.60	5.0	0.1	7.5	15	5.0
ZMM 11	10.40	11.60	5.0	0.1	8.2	20	5.0
ZMM 12	11.40	12.70	5.0	0.1	9.1	20	5.0
ZMM 13	12.40	14.10	5.0	0.1	10.0	26	5.0
ZMM 14	13.30	14.70	5.0	0.1	10.0	26	5.0
ZMM 15	13.80	15.60	5.0	0.1	11.0	30	5.0
ZMM 16	15.30	17.10	5.0	0.1	12.0	40	5.0
ZMM 18	16.80	19.10	5.0	0.1	13.0	50	5.0
ZMM 20	18.80	21.20	5.0	0.1	15.0	55	5.0
ZMM 22	20.80	23.30	5.0	0.1	16.0	55	5.0
ZMM 24	22.80	25.60	5.0	0.1	18.0	80	5.0
ZMM 27	25.10	28.90	5.0	0.1	20.0	80	5.0
ZMM 30	28.00	32.00	5.0	0.1	22.0	80	5.0
ZMM 33	31.00	35.00	5.0	0.1	24.0	80	5.0
ZMM 36	34.00	38.00	5.0	0.1	27.0	80	5.0
ZMM 39	37.00	41.00	2.5	0.1	30.0	90	2.5

Notes:

- 1) Tested with pulses $t_p = 20$ ms.
- 2) $V_F(\text{Max}) = 1.20\text{V} @ I_F = 100\text{mA}$
- 3) The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.
- 4) These diodes are also available in DO-35 case with the type designation BZX55C...

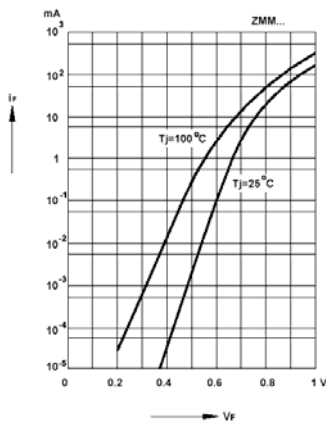
Breakdown characteristics

at $T_j = \text{constant}$ (pulsed)

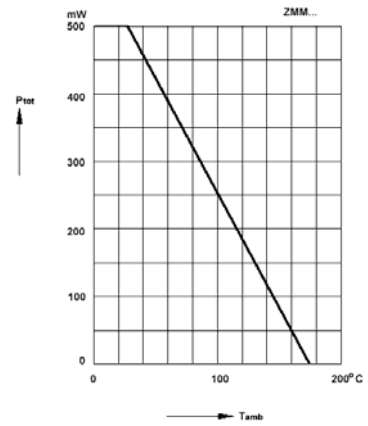


ZMM Series

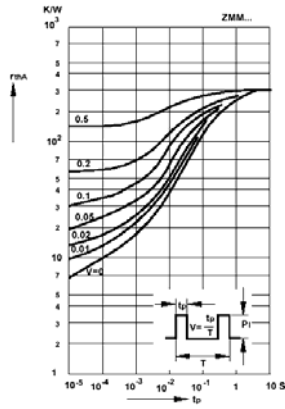
Forward characteristics



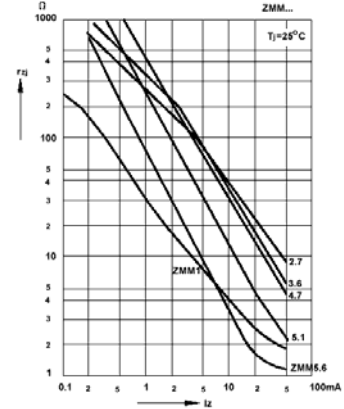
Admissible power dissipation versus ambient temperature



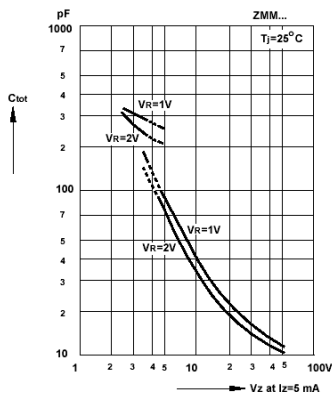
Pulse thermal resistance versus pulse duration



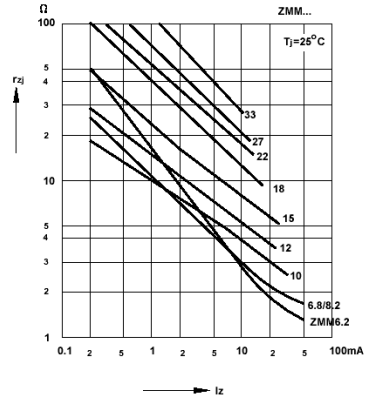
Dynamic resistance versus Zener current



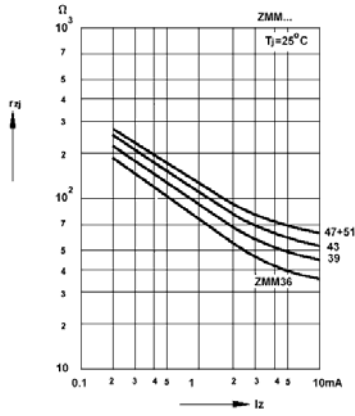
Capacitance versus Zener voltage



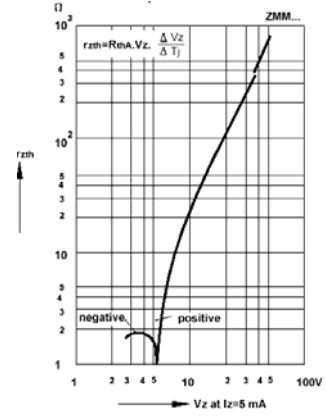
Dynamic resistance versus Zener current



Dynamic resistance versus Zener current

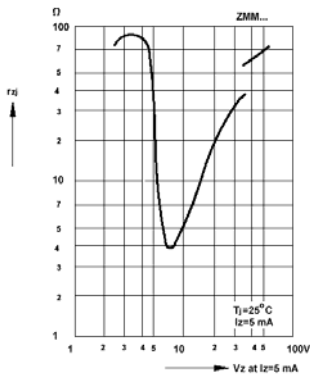


Thermal differential resistance versus Zener voltage

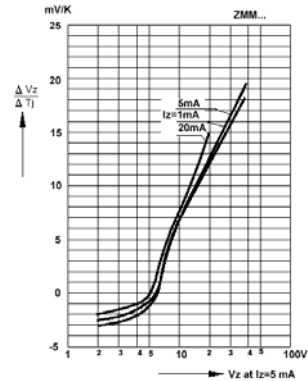


ZMM Series

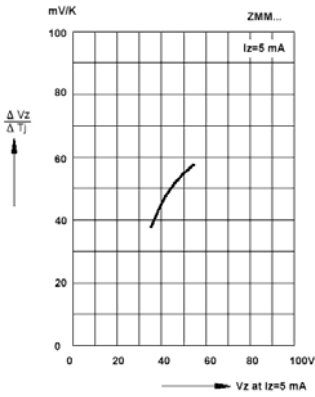
Dynamic resistance versus Zener voltage



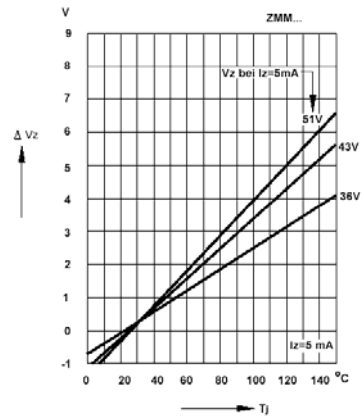
Temperature dependence of Zener voltage versus Zener voltage



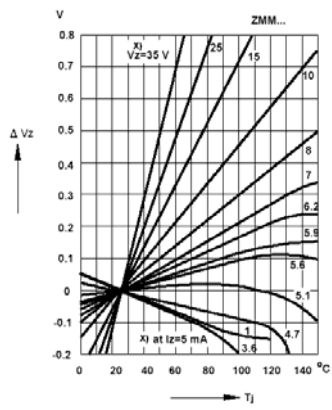
Temperature dependence of Zener voltage versus Zener voltage



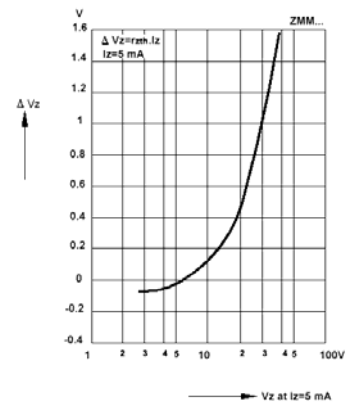
Change of Zener voltage versus junction temperature



Change of Zener voltage versus junction temperature



Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage



Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage

