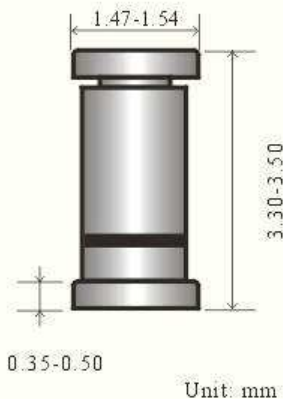


Features

- Low Reverse Leakage
- Low Zener Impedance
- 500mW; Power Dissipation of 500mW
- High Stability and High Reliability

Mechanical Data

- Case: LL-34 Glass Case
- Polarity: Color band denotes cathode end
- Mounting Position: Any

LL-34 GLASS

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Power Dissipation	Pd	500 ¹⁾	mW
Operating junction temperature	Tj	175	°C
Storage temperature range	Ts	-55-+175	°C

¹⁾ Valid provided that electrodes are kept at ambient temperature

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

TYPE	Zener Voltage			Reverse Current		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

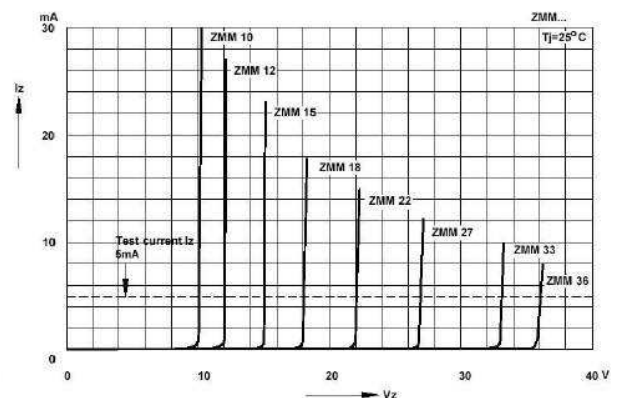
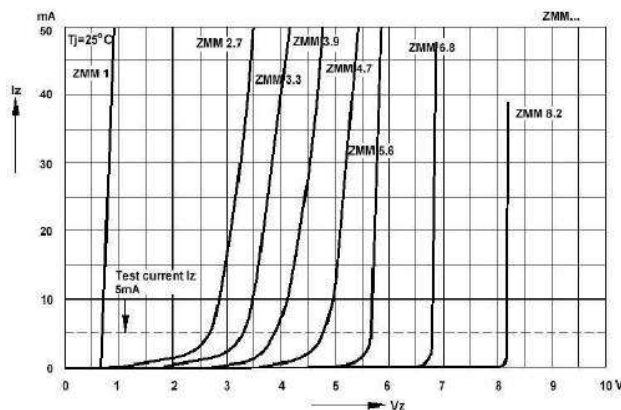
TYPE	Zener Voltage		Reverse Current		Dynamic Resistance	
	Vz(V)		Test Condition		Test Condition	
	Min.	Max.	Iz(mA)	Max.	Vr(V)	Iz(mA)
ZMM 9V1	8.50	9.60	5.0	0.1	6.8	10
ZMM 10	9.40	10.60	5.0	0.1	7.5	15
ZMM 11	10.40	11.60	5.0	0.1	8.2	20
ZMM 12	11.40	12.70	5.0	0.1	9.1	20
ZMM 13	12.40	14.10	5.0	0.1	10.0	26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

Notes:

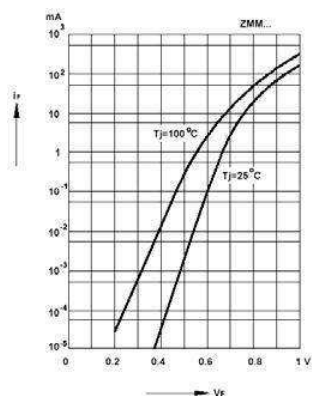
- 1) Tested with pulses $t_p = 20$ ms.
- 2) $V_F(\text{Max}) = 1.20\text{V} @ I_F = 100\text{mA}$
- 3) The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.
- 4) These diodes are also available in DO-35 case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

Breakdown characteristics

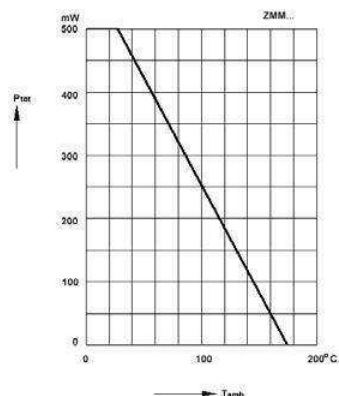
at $T_j = \text{constant}$ (pulsed)



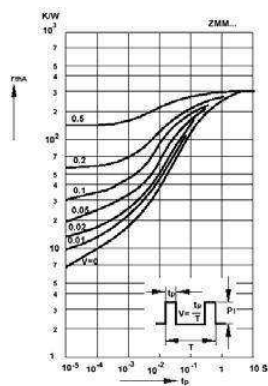
Forward characteristics



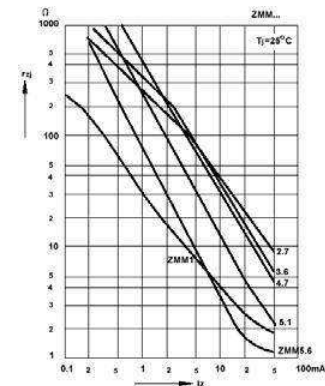
Admissible power dissipation versus ambient temperature



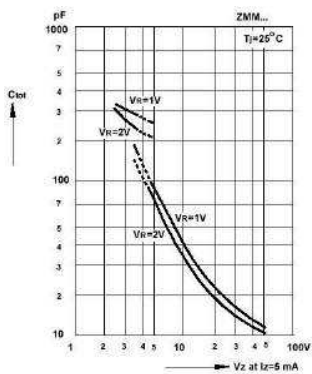
Pulse thermal resistance versus pulse duration



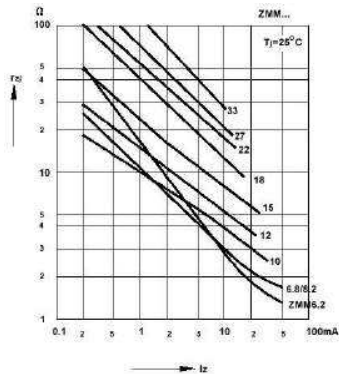
Dynamic resistance versus Zener current



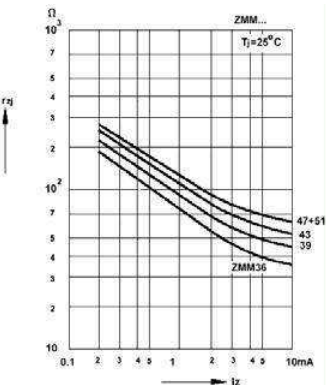
Capacitance versus Zener voltage



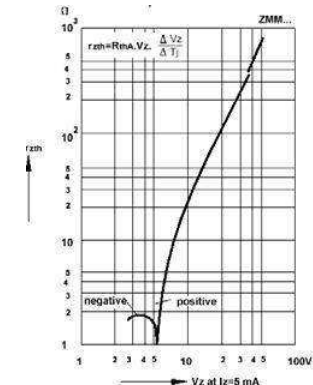
Dynamic resistance versus Zener current



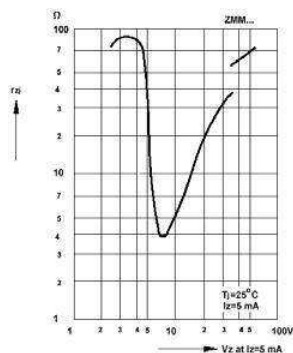
Dynamic resistance versus Zener current



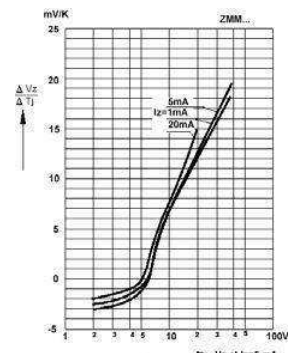
Thermal differential resistance versus Zener voltage



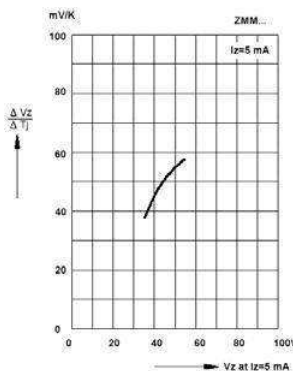
Dynamic resistance versus Zener voltage



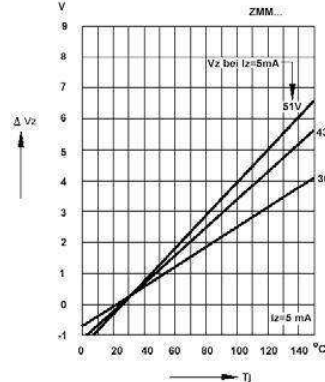
Temperature dependence of Zener voltage versus Zener voltage



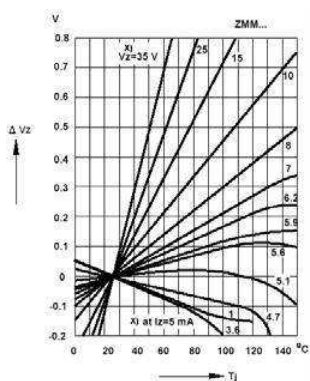
Temperature dependence of Zener voltage versus Zener voltage



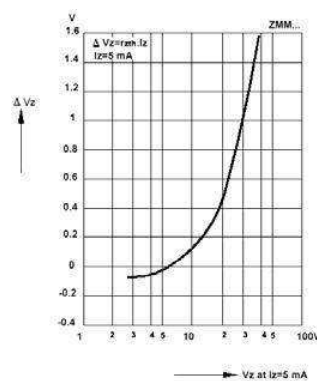
Change of Zener voltage versus junction temperature



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

