LL34 SURFACE MOUNT ZENER DIODES

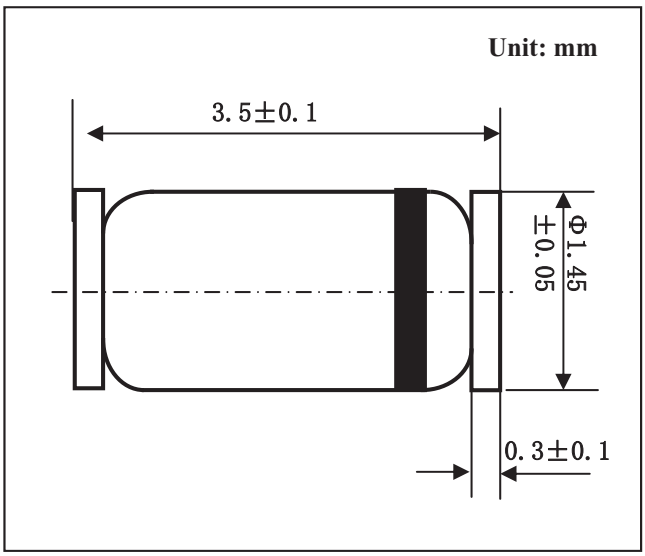
ZENER VOLTAGE RANGE: 2.0 --- 75V PEAK PULSE POWER:500mW

Features

- Low Reverse Leakage
- Low Zener Impedance
- High Stability and High Reliability

Mechanical Data

- Case: LL34 Glass Case
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 ℃ ambient temperature unless otherwise specified

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

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

Characteristics at Ta=25℃

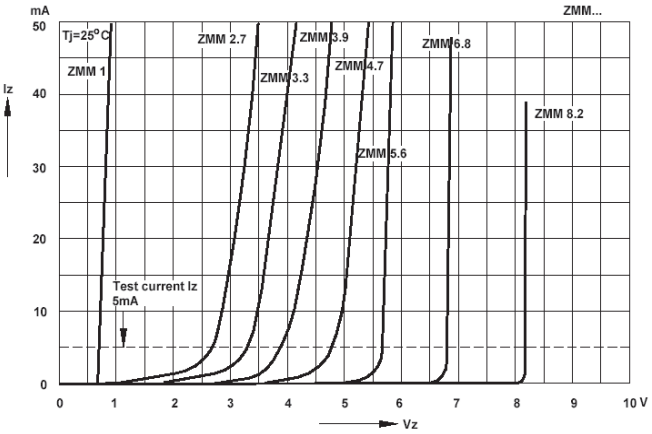
Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	—	—	0.3[1)]	K/W
Forward Voltage at I_F=200mA	V_F	—	—	1	V

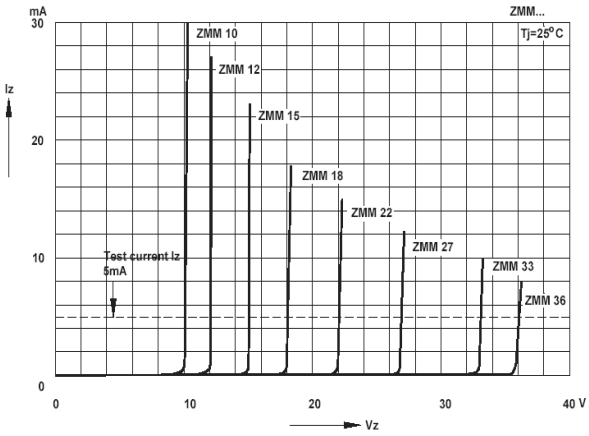
1) Valid provided that electrodes are kept at ambient temperature.

TYPE	V_Z	Z_{ZT}	Z_{ZK}	α vz	I_{RM}		I_{ZM}
	@I_{ZT}=5vmA	@I_{ZT}	I_{ZK}=1mA	%/℃	I_{RM}	V_R	
	V	Ω	Ω		μA	V	mA
500mw ZENER DIODES/LL34(MiniMELF)							
ZMM2V0	1.8~2.15	85	600	-0.085	100	1.0	180
ZMM2V2	2.08~2.33	85	600	-0.085	75	1.0	160
ZMM2V4	2.28～2.56	85	600	-0.085	50	1.0	150
ZMM2V7	2.5～2.9	85	600	-0.080	10	1.0	135
ZMM3V0	2.8～3.2	85	600	-0.075	4	1.0	125
ZMM3V3	3.1～3.5	85	600	-0.070	2	1.0	115
ZMM3V6	3.4～3.8	85	600	-0.065	2	1.0	105
ZMM3V9	3.7～4.1	85	600	-0.060	2	1.0	95
ZMM4V3	4.0～4.6	75	600	±0.055	1	1.0	90
ZMM4V7	4.4～5.0	60	600	±0.030	0.5	1.0	85
ZMM5V1	4.8～5.4	35	550	±0.030	0.1	1.0	80
ZMM5V6	5.2～6.0	25	450	+0.038	0.1	1.0	70
ZMM6V2	5.8～6.6	10	200	+0.045	0.1	2.0	64
ZMM6V8	6.4～7.2	8	150	+0.050	0.1	3.0	58
ZMM7V5	7.0～7.9	7	50	+0.058	0.1	5.0	53
ZMM8V2	7.7～8.7	7	50	+0.062	0.1	6.0	47
ZMM9V1	8.5～9.6	10	50	+0.068	0.1	7.0	43
ZMM10	9.4～10.6	15	70	+0.075	0.1	7.5	40
ZMM11	10.4～11.6	20	70	+0.076	0.1	8.5	36
ZMM12	11.4～12.7	20	90	+0.077	0.1	9.0	32
ZMM13	12.4～14.1	26	110	+0.079	0.1	10	29
ZMM15	13.8～15.6	30	110	+0.082	0.1	11	27
ZMM16	15.3～17.1	40	170	+0.083	0.1	12	24
ZMM18	16.8～19.1	50	170	+0.085	0.1	14	21
ZMM20	18.8～21.2	55	220	+0.086	0.1	15	20
ZMM22	20.8～23.3	55	220	+0.087	0.1	17	18
ZMM24	22.8～25.6	80	220	+0.088	0.1	18	16
ZMM27	25.1～28.9	80	220	+0.090	0.1	20	14
ZMM30	28～32	80	220	+0.091	0.1	22	13
ZMM33	31～35	80	220	+0.092	0.1	24	12
ZMM36	34～38	80	220	+0.093	0.1	27	11
ZMM39	37～41	90	500	+0.094	0.1	30	10
ZMM43	40～46	90	600	+0.095	0.1	33	9.2
ZMM47	44～50	110	700	+0.095	0.1	36	8.5
ZMM51	48～54	125	700	+0.096	0.1	39	7.8
ZMM56	52～60	135	1000	+0.096	0.1	43	7
ZMM62	58～66	150	1000	+0.096	0.1	47	6.4
ZMM68	64～72	200	1000	+0.096	0.1	51	5.9
ZMM75	70～79	250	1500	+0.096	0.1	56	5.3

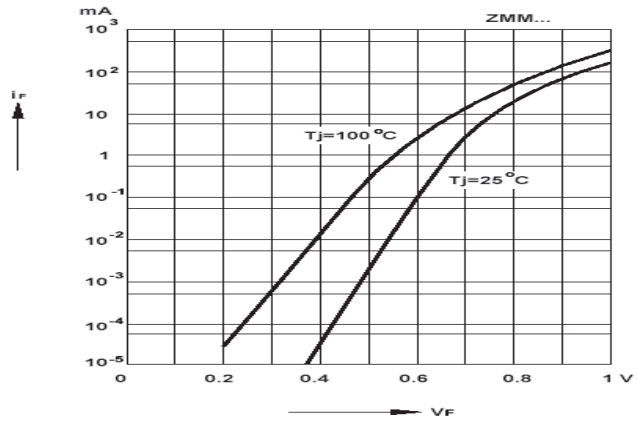
RATINGS AND CHARACTERISTIC CURVES

Breakdown characteristics at Tj=constant (pulsed)

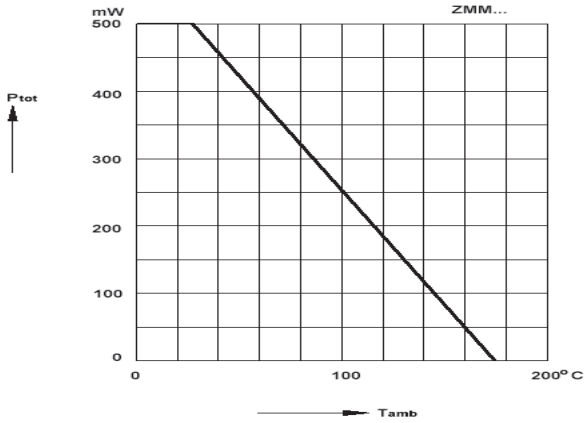




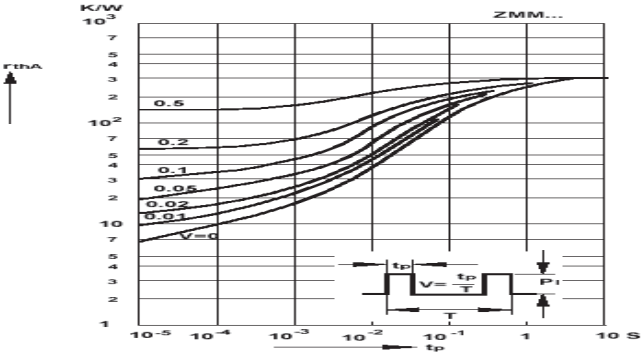
Forward characteristics



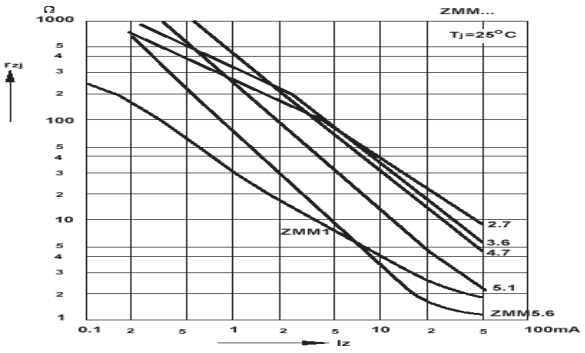
Admissible power dissipation versus ambient temperature



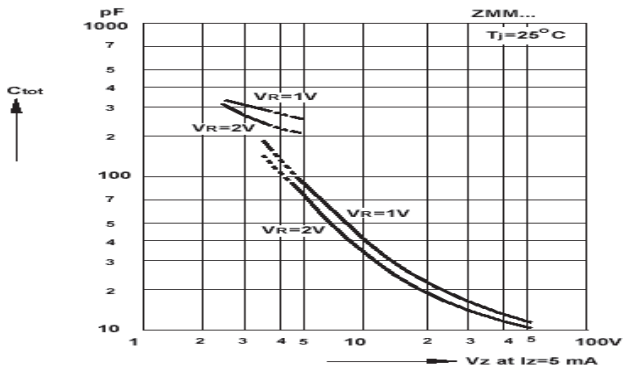
Pulse thermal resistance versus pulse duration



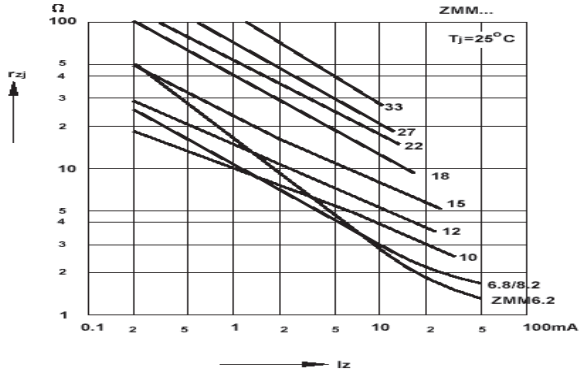
Dynamic resistance versus Zener curren



Capacitance versus Zener voltage

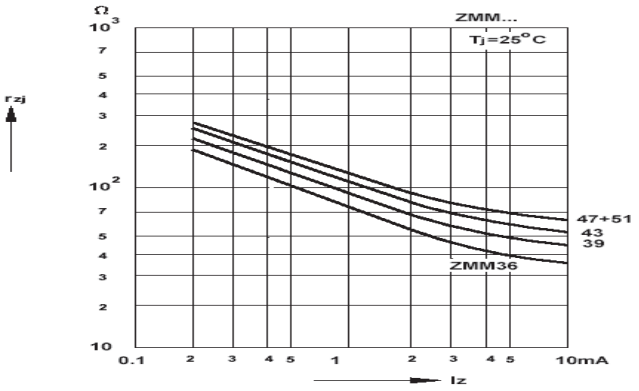


Dynamic resistance versus Zener current

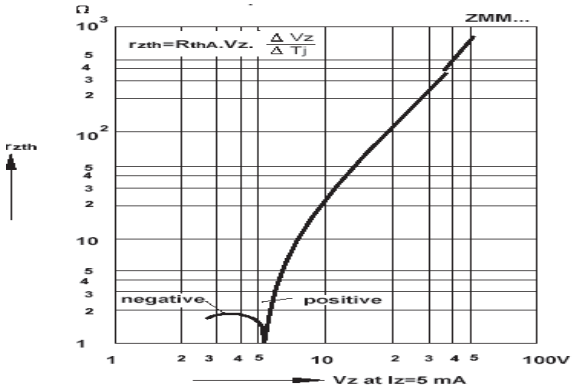


RATINGS AND CHARACTERISTIC CURVES

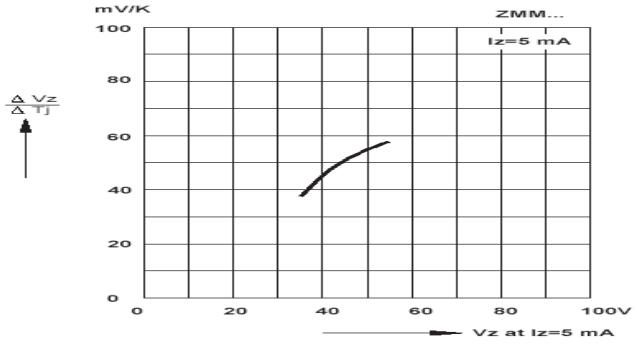
Dynamic resistance versus Zener current



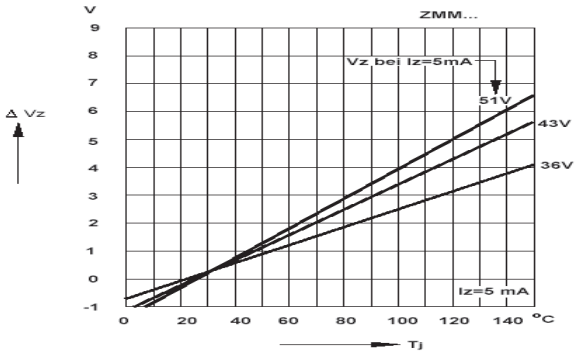
Thermal differential resistance versus Zener voltage



Dynamic resistance versus Zener voltage



Change of Zener voltage versus junction temperature



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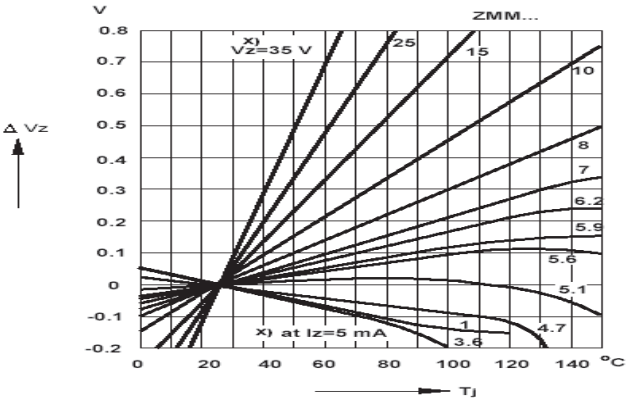
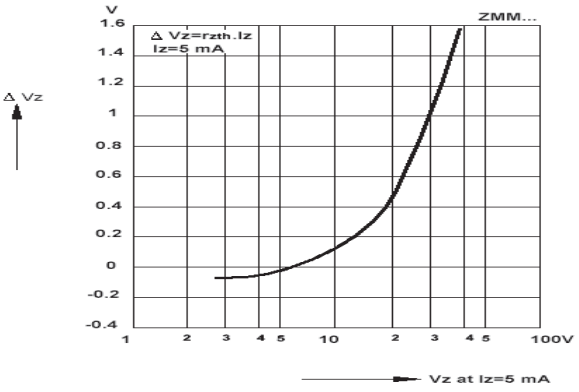


Change of Zener voltge from turn-on up to the point of thermal equilibrium versus Zener voltage



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