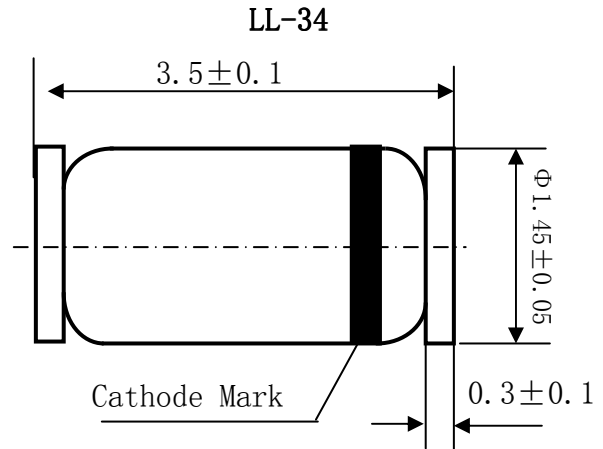


## FEATURES

in MinMELF case especially for automatic insertion.

The Zener voltages are graded according to 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...



Glass case MiniMELF  
Dimensions in mm

## ABSOLUTE RATINGS (Ta=25°C)

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	500 <sup>1)</sup>	mW
Junction Temperature	$T_j$	175	°C
Storage Temperature Range	$T_s$	-55 to +175	°C

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.

## Characteristics at Ta=25°C

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

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.

TYPE	$V_Z$	$Z_{ZT}$	$Z_{ZK}$	$\alpha_{vz}$	$I_{RM}$		$I_{ZM}$
	@ $I_{ZT}=5\text{mA}$	@ $I_{ZT}$	$I_{ZK}=1\text{mA}$	%/°C	$I_{RM}$	$V_R$	
	V	$\Omega$	$\Omega$		$\mu\text{A}$	V	

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	$\pm 0.055$	1	1.0	90
ZMM4V7	4.4~5.0	60	600	$\pm 0.030$	0.5	1.0	85
ZMM5V1	4.8~5.4	35	550	$\pm 0.030$	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

标准电压容差 $\pm 5\%$

后缀“A”容差 $\pm 1\%$

后缀“B”容差 $\pm 2\%$

Standard voltage tolerance is  $\pm 5\%$

Suffix “A” for  $\pm 1\%$

Suffix “B” for  $\pm 2\%$

后缀“C”容差 $\pm 5\%$

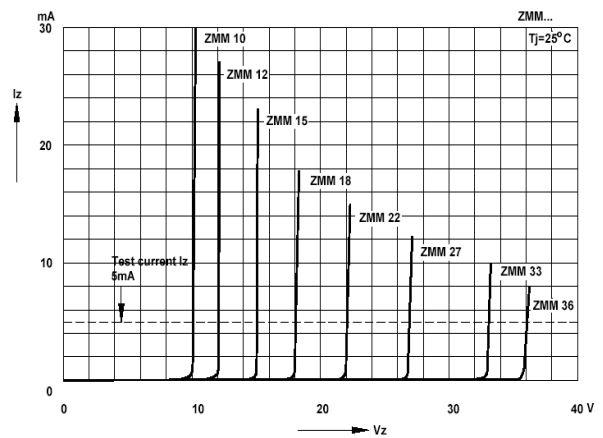
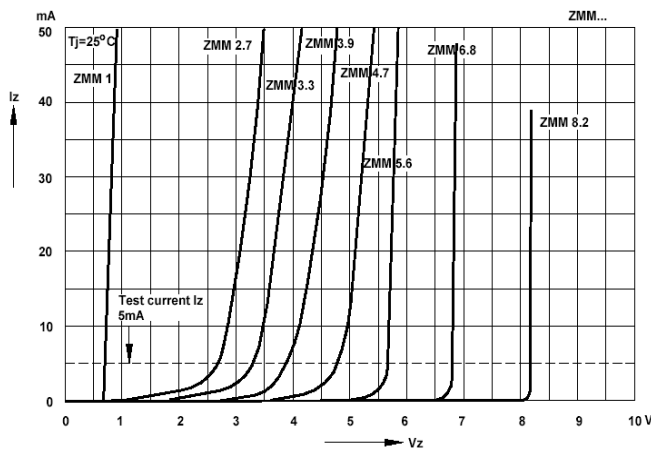
后缀“D”容差 $\pm 20\%$

Suffix “C” for  $\pm 5\%$

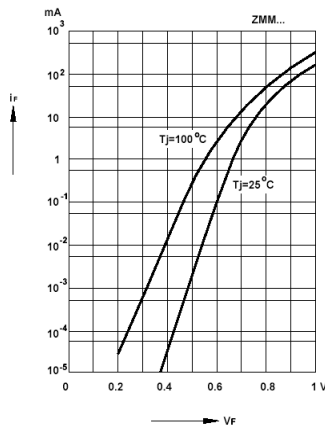
Suffix “D” for  $\pm 20\%$

**Breakdown characteristics**

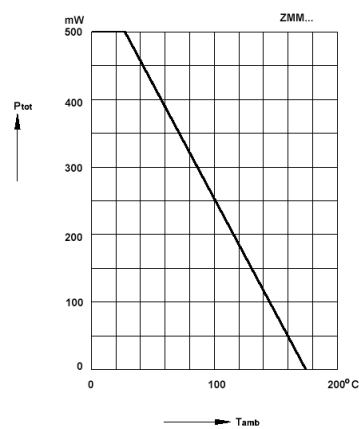
at  $T_j = \text{constant}$  (pulsed)



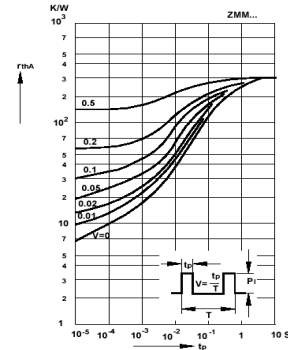
**Forward characteristics**



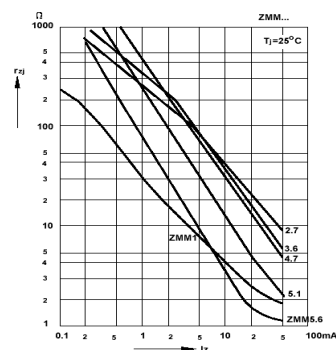
**Admissible power dissipation versus ambient temperature**



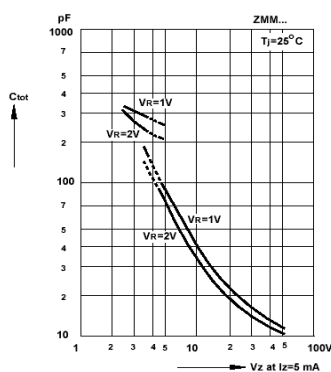
**Pulse thermal resistance versus pulse duration**



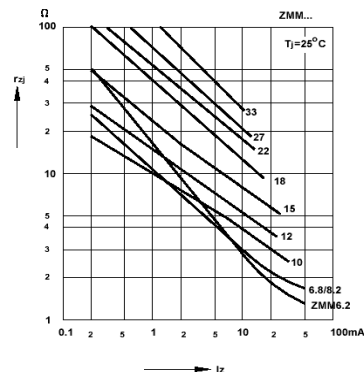
**Dynamic resistance versus Zener current**



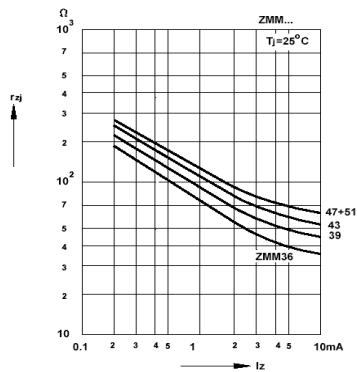
**Capacitance versus Zener voltage**



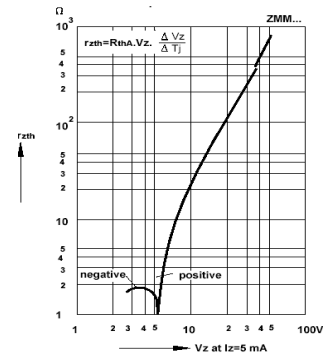
**Dynamic resistance versus Zener current**



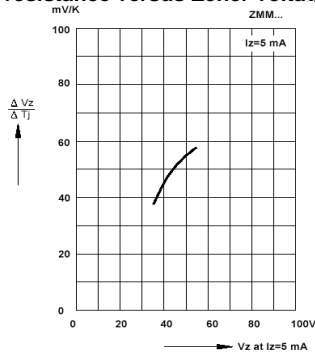
Dynamic resistance versus Zener current



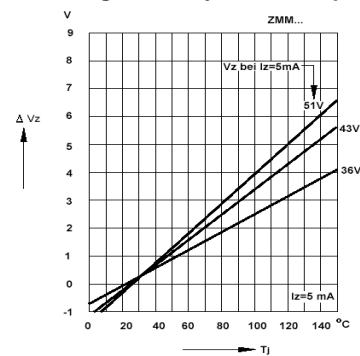
Thermal differential resistance versus Zener voltage



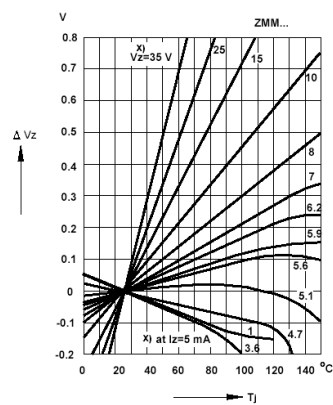
Dynamic resistance versus Zener voltage



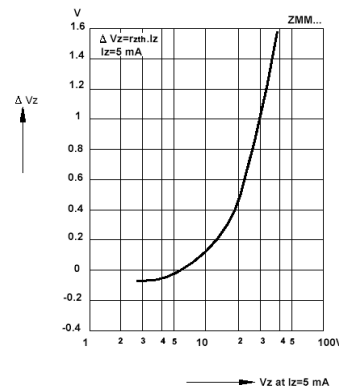
Change of Zener voltage versus junction temperature



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

