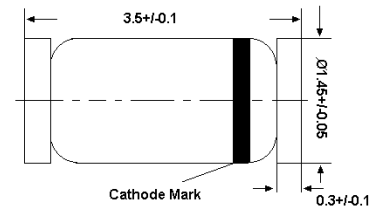




Silicon Epitaxial Planar Zener Diodes

in 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.

LL-34



Glass case MiniMELF
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175	$^\circ\text{C}$

¹⁾ Valid provided that electrodes are kept at ambient temperature

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

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1	V
Reverse Leakage Current	I_R	0.2	μA

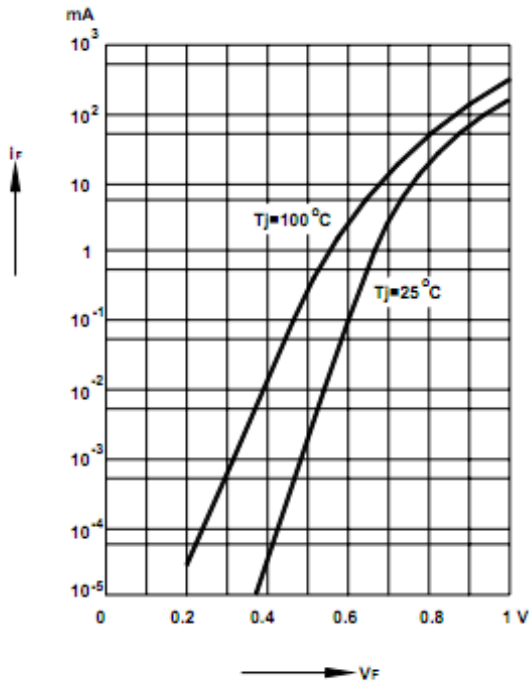
¹⁾ Valid provided that electrodes are kept at ambient temperature

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

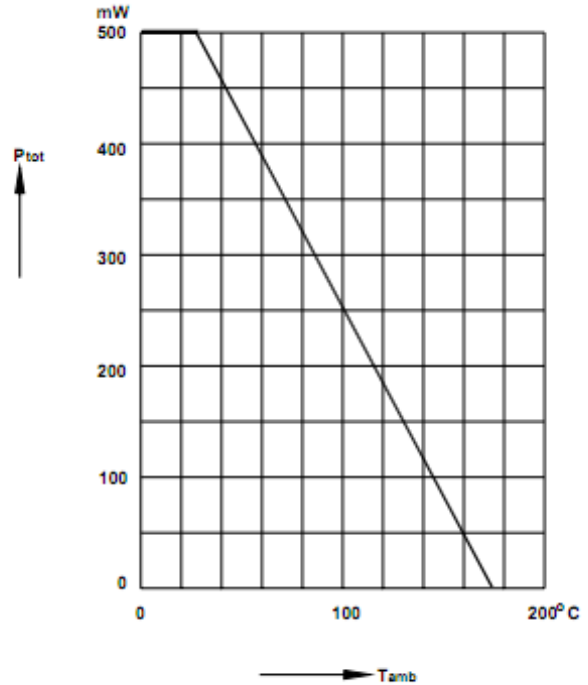
Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	$V_{Z\text{nom}}$	V_{ZT}	at I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	$T_a = 25^\circ\text{C}$	$T_a = 125^\circ\text{C}$	at V_R	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	Max. (μA)	(V)	
ZMM5B1	5.1	5 ... 5.2	5	35	550	1	0.1	2	1	-0.02...+0.02



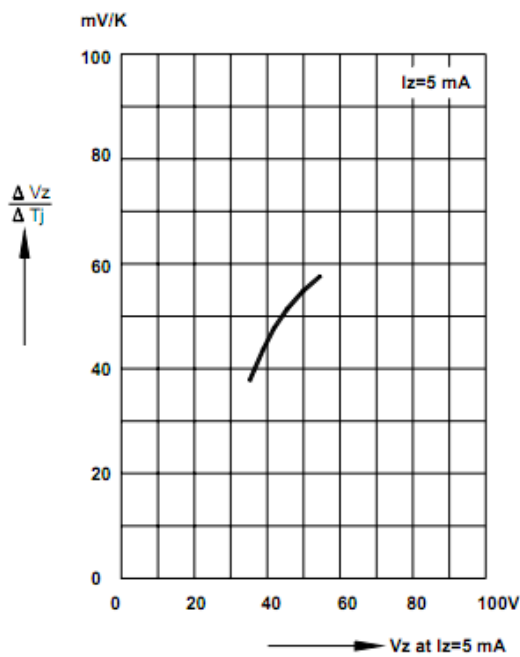
Forward characteristics



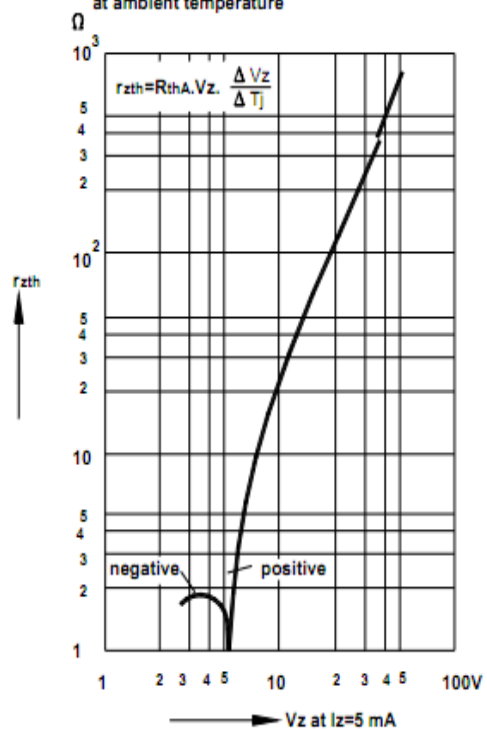
Admissible power dissipation
versus ambient temperature
Valid provided that electrodes are kept
at ambient temperature.



Temperature dependence of Zener voltage
versus Zener voltage

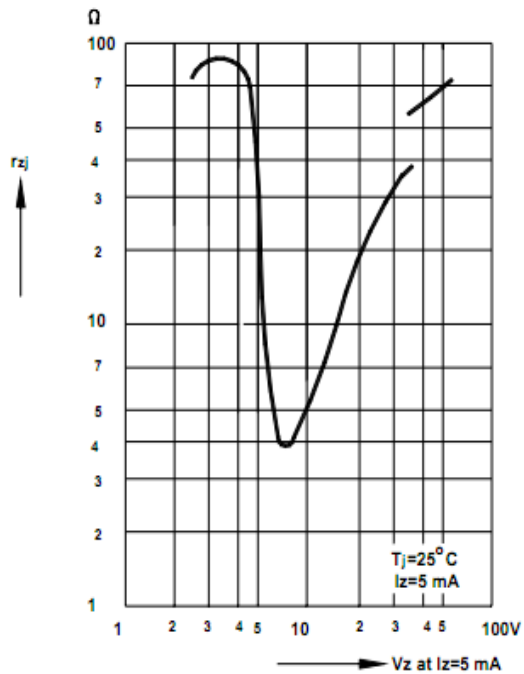


Thermal differential resistance
versus Zener voltage
Valid provided that electrodes are kept
at ambient temperature

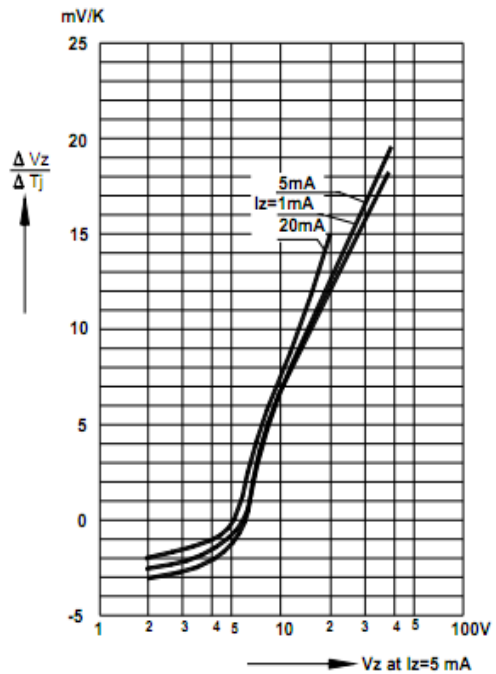




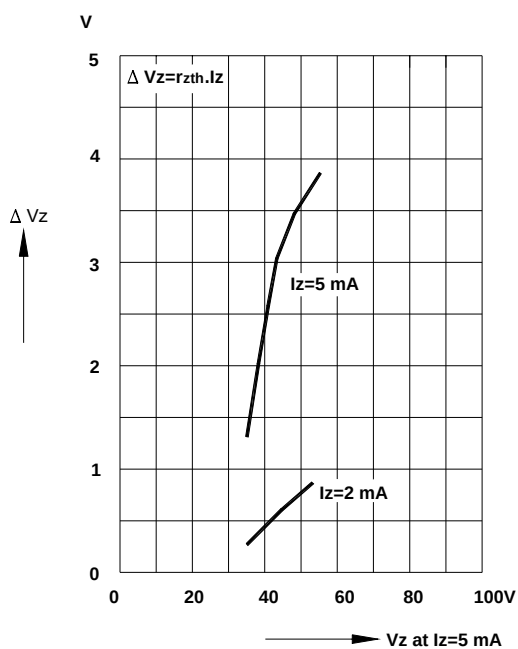
Dynamic resistance
versus Zener voltage



Temperature dependence of Zener voltage
versus Zener voltage



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

