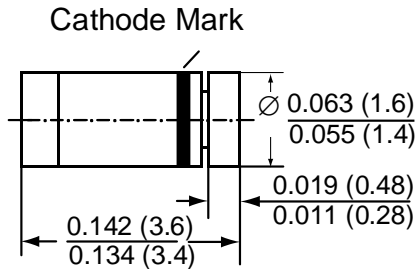
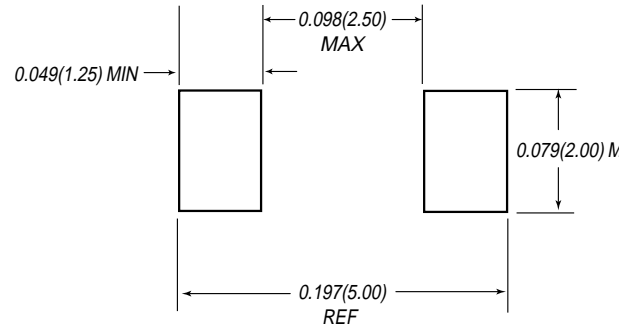


MiniMELF (SOD-80C)



Dimensions in inches and (millimeters)

Mounting Pad Layout



Features

- Silicon Planar Stabilizer Diodes
- Monolithic integrated analog circuits in MiniMELF case, designed for small power stabilizer and limitation circuits, providing low dynamic resistance and high-quality stabilization performance as well as low noise. In the reverse direction, these devices show the behavior of forward-biased silicon diodes.
- The end of the device marked with the cathode ring is to be connected: LL1.5 and LL2 to the negative pole of the supply voltage; LL2.4 to the positive pole of the supply voltage
- These diodes are also available in DO-35 case with the type designation ZTE1.5 ... ZTE 2.4.

Mechanical Data

Case: MiniMELF Glass Case (SOD-80C)

Weight: approx. 0.05g

Packaging codes/options:

D1/10K per 13" reel (8mm tape), 20K/box
D2/2.5K per 7" reel (8mm tape), 20K/box

Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating Current (see Table "Characteristics")			
Inverse Current	I _F	100	mA
Power dissipation at T _{amb} = 25°C	P _{tot}	300 ⁽¹⁾	W
Junction temperature	T _J	150	°C
Storage temperature range	T _S	-55 to +150	°C

Electrical and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I _F = 10mA	V _F	-	-	1.1	V
Temperature Coefficient of the stabilized voltage at I _Z = 5mA	α _{VZ}	-	-26	-	10 ⁻⁴ /°C
		-	-34	-	10 ⁻⁴ /°C
Thermal resistance junction to ambient air	R _{θJA}	-	-	0.4 ⁽¹⁾	°C/W

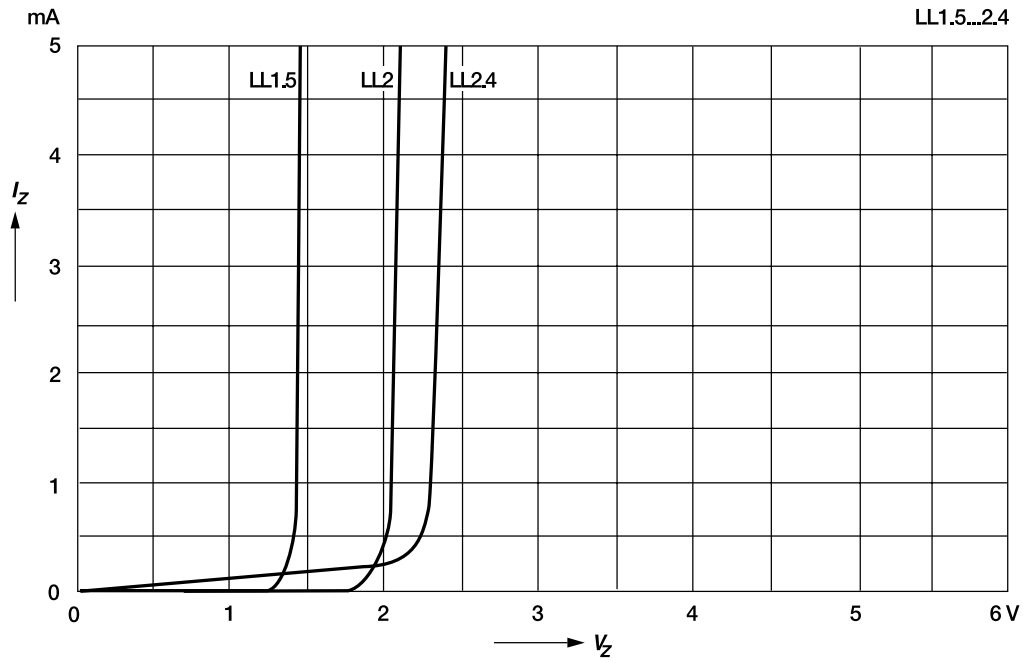
Type	Operating Voltage at I _Z = 5mA ⁽²⁾ V _Z (V)	Dynamic resistance at I _Z = 5mA r _{Zj} (Ω)	Permissible operating current at T _{amb} = 25°C ⁽¹⁾ I _Z max. (mA)
LL1.5	1.35 ... 1.55	13(<20)	120
LL2	2.0 ... 2.3	18(<30)	120
LL2.4	2.2 ... 2.56	14(<20)	120

Notes: (1) Valid provided that electrodes are kept at ambient temperature
(2) Tested with pulses t_p = 5ms

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

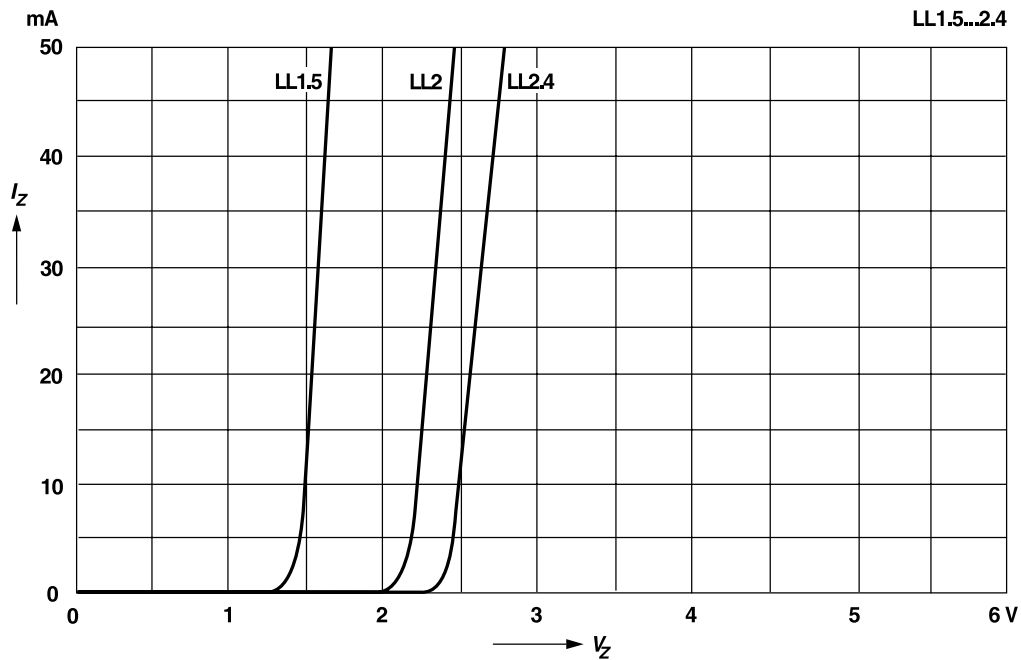
Breakdown characteristics

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



Breakdown characteristics

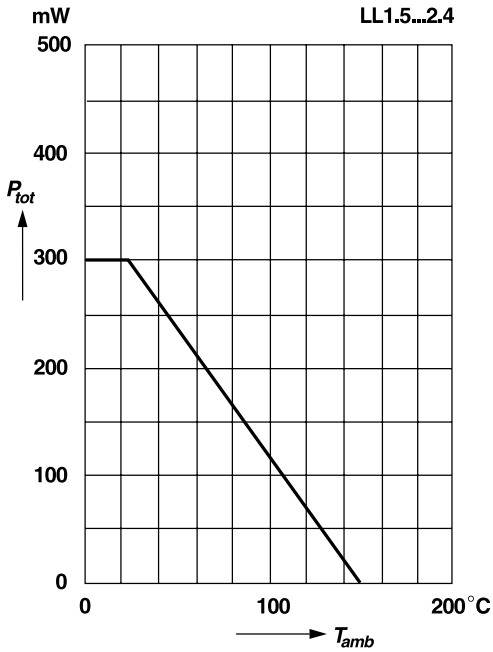
$T_j = \text{constant (pulsed)}$



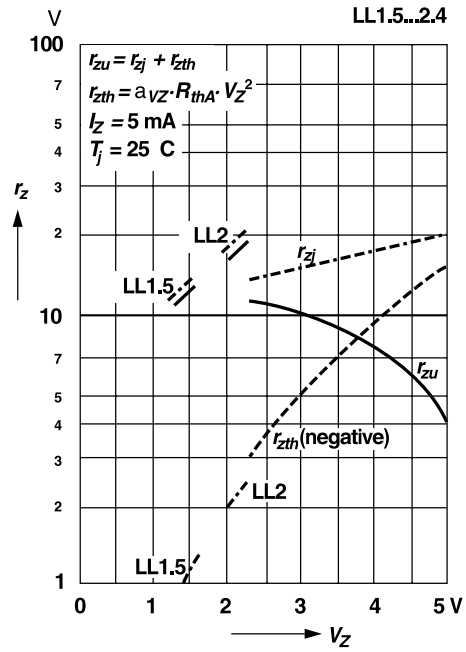
Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature.



Dynamic resistance versus operating voltage



Dynamic resistance versus operating current, normalized

