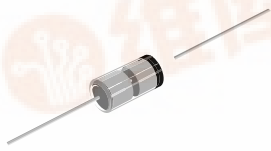
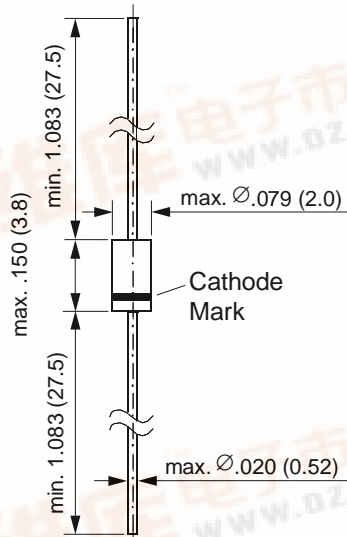


ZTE1.5 thru ZTE2.4

Voltage Stabilizers



DO-204AH (DO-35 Glass)



Dimensions are in inches and (millimeters)

Features

- Silicon Stabilizer Diodes
- Monolithic integrated analog circuits 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 ZTE device marked with the cathode ring is to be connected: ZTE1.5 and ZTE2 to the negative pole of the supply voltage; ZTE2.4 to the positive pole of the supply voltage
- These diodes are also available in MiniMELF case with the type designation LL1.5 ... LL 2.4.

Mechanical Data

Case: DO-35 Glass Case**Weight:** approx. 0.13g**Packaging codes/options:**

D7/10K per 13" reel (52mm tape), 20K/box

D8/10K per Ammo tape, (52mm 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⁾	mW
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 = 10 mA	V _F	—	—	1.1	V
Temperature Coefficient of the stabilized voltage at I _Z = 5 mA	ZTE1.5, ZTE2 α _{VZ} ZTE2.4 α _{VZ}	—	-26 -34	—	10 ⁻⁴ /°C 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)
ZTE1.5	1.35 ... 1.55	13(<20)	120
ZTE2	2.0 ... 2.3	18(<30)	120
ZTE2.4	2.2 ... 2.56	14(<20)	120

Notes: (1) Valid provided that electrodes are kept at ambient temperature at a distance of 8mm from case

(2) Tested with pulses t_p = 5ms

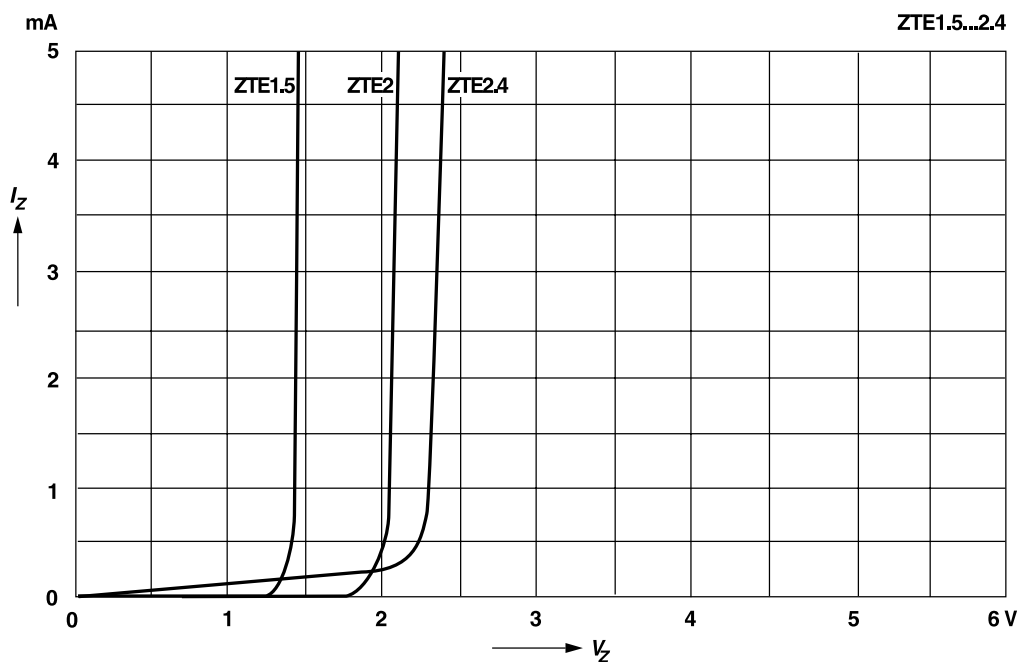
ZTE1.5 thru ZTE2.4

Voltage Stabilizers

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

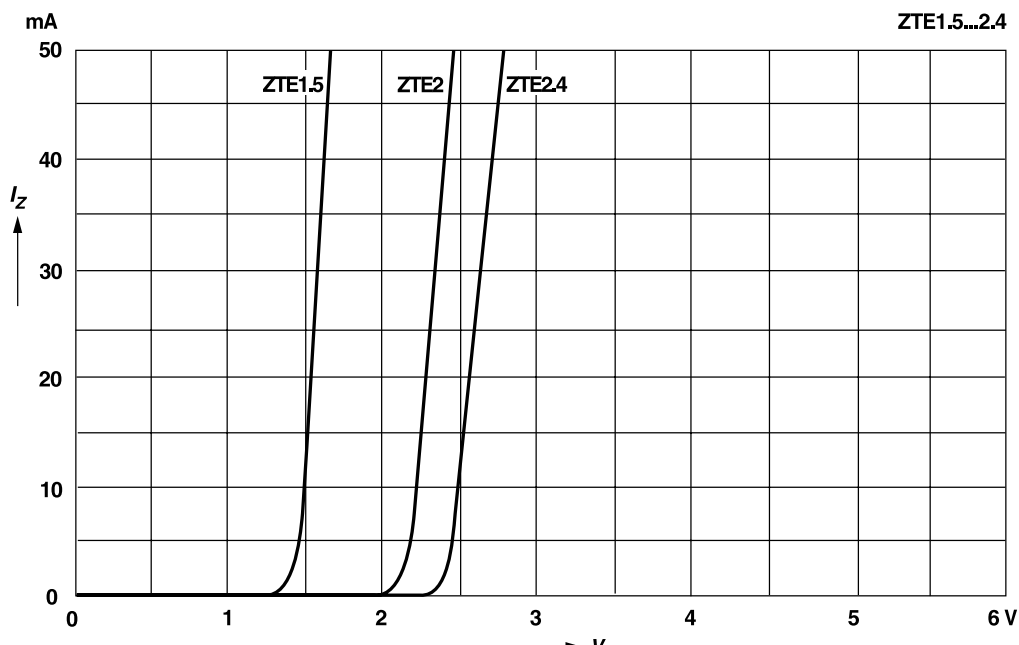
Breakdown characteristics

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



Breakdown characteristics

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



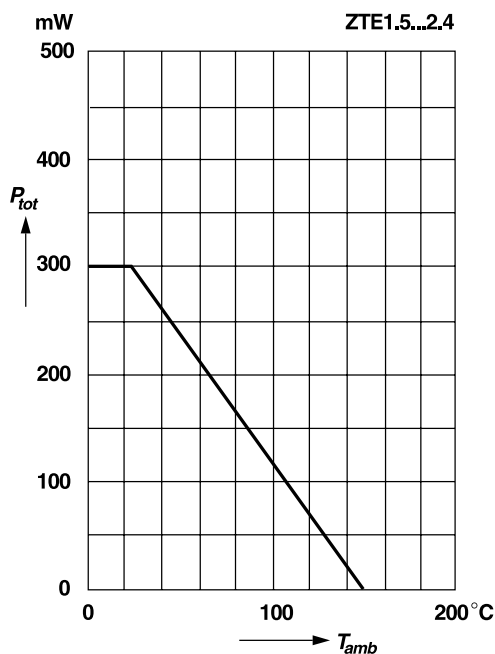
ZTE1.5 thru ZTE2.4

Voltage Stabilizers

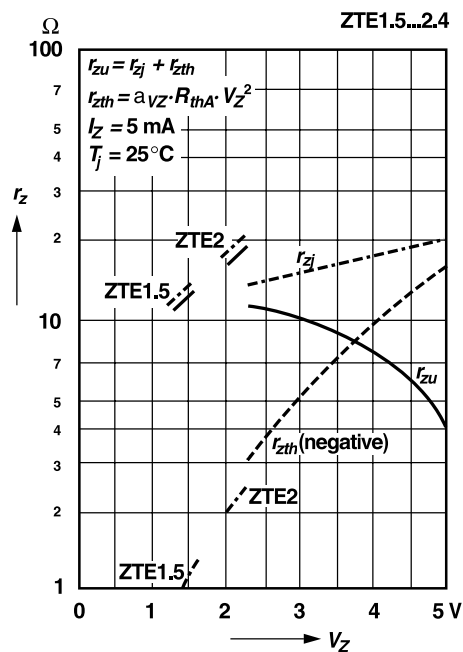
Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Admissible power dissipation versus ambient temperature

Valid provided that leads at a distance of 8 mm from case
are kept at ambient temperature



Dynamic resistance versus operating voltage



Dynamic resistance versus operating current, normalized

