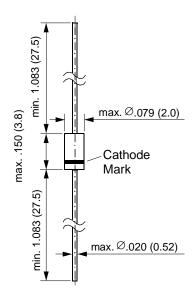


## ZTE1.5 thru ZTE2.4

## **Voltage Stabilizers**





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 (TA = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating Current (see Table "Characteristics")			
Inverse Current	lF	100	mA
Power dissipation at T <sub>amb</sub> = 25°C	Ptot	300 <sup>(1)</sup>	mW
Junction temperature	TJ	150	°C
Storage temperature range	Ts	-55 to +150	°C

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

Parameter		Symbol	Min.	Тур.	Max.	Unit
Forward Voltage at IF = 10 mA		VF	_	_	1.1	V
Temperature Coefficient of the stabilized voltage at Iz = 5 mA	ZTE1.5, ZTE2 ZTE2.4	$lpha_{ extsf{VZ}} \ lpha_{ extsf{VZ}}$	_ _	-26 -34	_ _	10 <sup>-4</sup> /°C 10 <sup>-4</sup> /°C
Thermal resistance junction to ambie	ent air	$R_{\theta JA}$	_	_	0.4(1)	°C/W

Туре	Operating Voltage at Iz = 5mA <sup>(2)</sup> Vz (V)	Dynamic resistance at $Iz = 5mA$ $r_{zj}(\Omega)$	Permissable operating current at T <sub>amb</sub> = 25°C <sup>(1)</sup> I <sub>Z</sub> 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

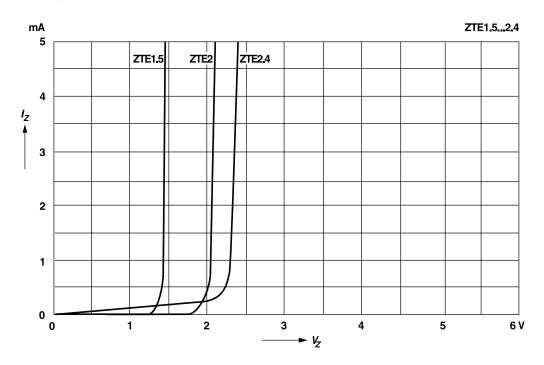


# **Voltage Stabilizers**

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

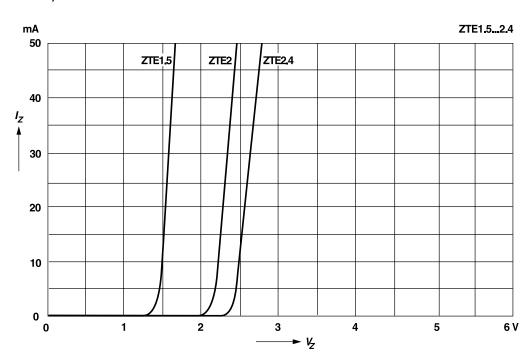
#### **Breakdown characteristics**

T<sub>i</sub> = constant (pulsed)



#### **Breakdown characteristics**

T<sub>i</sub> = constant (pulsed)



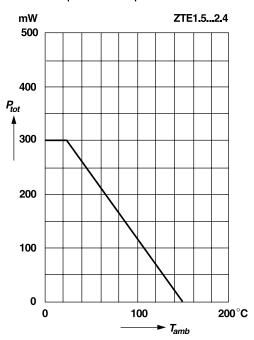


## **Voltage Stabilizers**

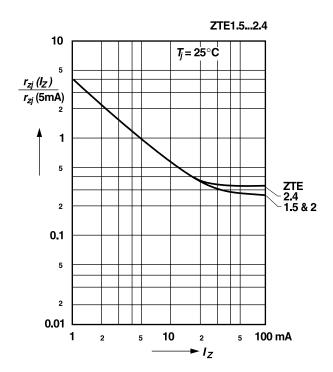
# Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

## 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 current, normalized



## Dynamic resistance versus operating voltage

