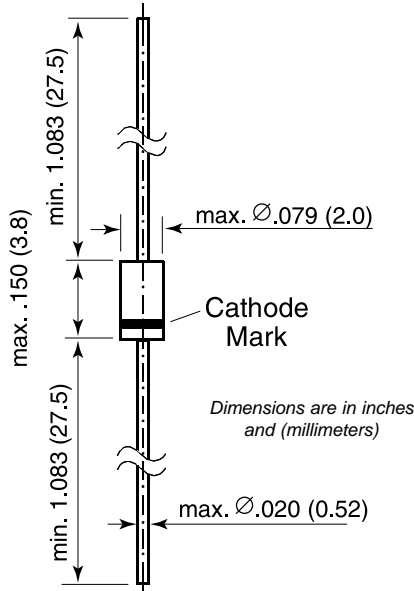


DO-204AH (DO-35 Glass)



Features

- Temperature-Compensated Stabilizing Circuits
- Monolithic linear integrated circuits with extremely short thermal run-in time producing a constant temperature-compensated voltage. They are particularly suitable for stabilizing the tuning voltage in radio and TV tuners employing voltage-variable capacitance diodes.

Mechanical Data

Case: DO-35 Glass Case

Weight: approx. 0.13 g

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")			
Junction temperature	T _J	150	°C
Storage temperature range	T _S	-20 to +150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Temperature Coefficient of the operating voltage at I _Z = 5 mA ±0.5 in the range of T _{amb} = 20 to 60°C	α _{VZ}	-10	-2	+5 ⁽¹⁾	10 ⁻⁵ /°C
Thermal Run-in-Time	t _{th}	-	-20 ⁽²⁾	-	s
Thermal resistance junction to ambient air	R _{θJA}	-	-	0.4	°C/W

Type	Operating Voltage at I _Z = 5mA ⁽³⁾ V _Z (V)	Dynamic resistance at I _Z = 5mA r _{Zj} (Ω)	Permissible operating at T _{amb} = 25°C ⁽⁴⁾ I _Z max. (mA)
ZTK6.8	6.4 ... 7.1	10(<25)	36
ZTK9	8 ... 10	10(<25)	27
ZTK11	10 ... 12	10(<25)	1
ZTK18	16 ... 20	11(<25)	13
ZTK22	20 ... 24	11(<25)	1
ZTK27	24 ... 30	12(<25)	8
ZTK33A	30 ... 32	12(<25)	7
ZTK33B	32 ... 34	12(<25)	7
ZTK33C	34 ... 36	12(<25)	7

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

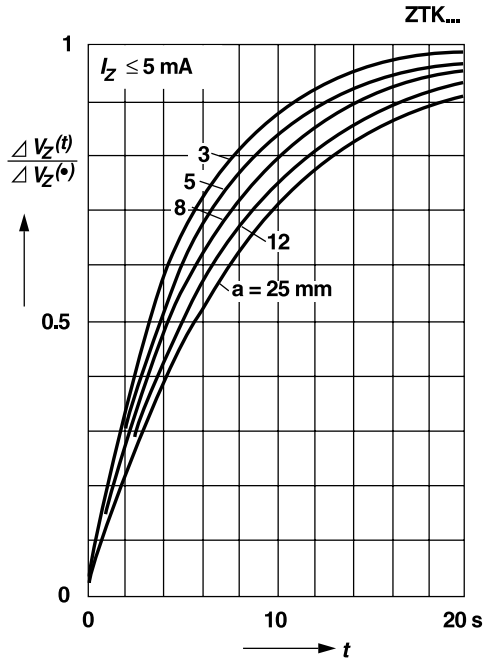
(2) At the end of this time ΔV_Z has reached 90% of its final value ΔV_Z max. ΔV_Z max = V_Z (a) - V_Z (0), where V_Z (0) = V_Z in the instant of turn-on and V_Z (a) = V_Z at thermal equilibrium

(3) Tested with pulses t_p = 5ms

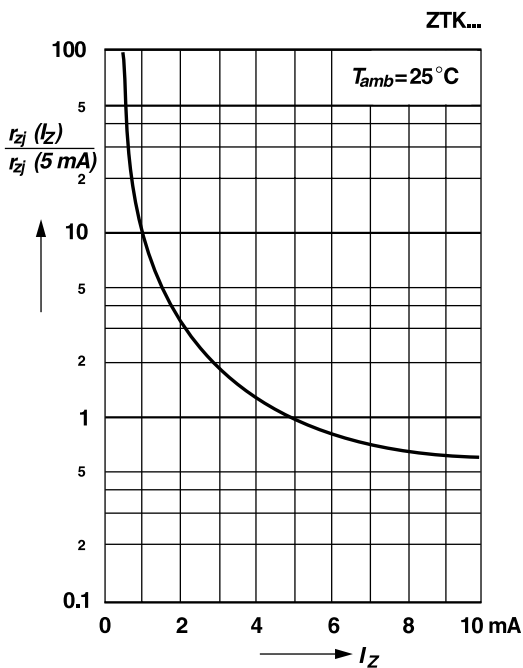
(4) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case

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

Time dependence of ΔV_Z after turn-on for different distances between case and point of ambient temperature on the leads

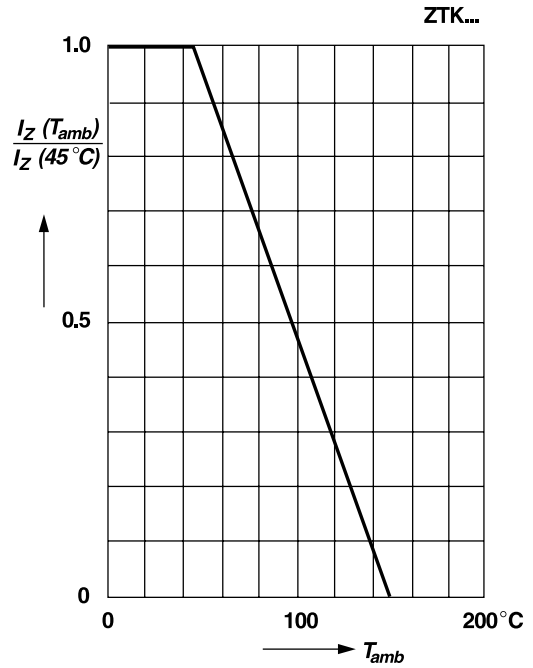


Dynamic resistance versus operating current



Permissible operating current versus ambient temperature

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



Change of temperature coefficient versus operating current

