

## STABISTORS

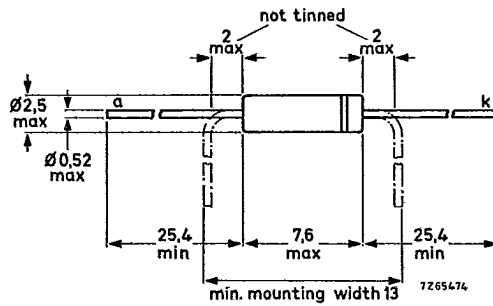
Diodes with controlled conductance in a all-glass DO-7 envelope intended for low voltage regulation in circuits for clipping, coupling, clamping, meter protection, bias regulation and in many applications which require tight tolerances and low voltage levels. The series consists of 4 types with nominal voltages ranging from 1,4 to 3,6V with a tolerance of  $\pm 5\%$ .

QUICK REFERENCE DATA			
Regulation voltage range	$V_F$	nom.	1,4 to 3,6 V
Regulation voltage tolerance			$\pm 5$ %
Continuous reverse voltage	$V_R$	max.	10 V
Repetitive peak reverse voltage	$V_{RRM}$	max.	10 V
Repetitive peak forward current	$I_{FRM}$	max.	250 mA
Total power dissipation up to $T_{amb} = 32$ °C	$P_{tot}$	max.	400 mW
Operating junction temperature	$T_j$	max.	200 °C

## MECHANICAL DATA

Dimensions in mm

DO-7



Cathode indicated by coloured band

T-11-21

**RATINGS** Limiting values in accordance with the Absolute Maximum System (IEC134)

Continuous reverse voltage	$V_R$	max.	10 V
Repetitive peak reverse voltage	$V_{RRM}$	max.	10 V
Repetitive peak forward current	$I_{FRM}$	max.	250 mA
Total power dissipation up to $T_{amb} = 32\text{ }^\circ\text{C}$	$P_{tot}$	max.	400 mW
Storage temperature	$T_{stg}$	-65 to +175	$^\circ\text{C}$
Operating junction temperature	$T_j$	max.	200 $^\circ\text{C}$

**THERMAL RESISTANCE**

From junction to ambient in free air	$R_{th\ j-a}$	=	0,42 K/mW
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T-11-21

CHARACTERISTICS

$T_j = 25\text{ }^\circ\text{C}$  unless otherwise specified

BZX75-....	Regulation voltage			Temperature coefficient	Differential resistance	
	$V_F$ (V)				$r_{diff}$ ( $\Omega$ ); $f = 1\text{ kHz}$	
	at $I_F = 1\text{ mA}$			at $I_F = 1\text{ mA}$		
	min.		max.	typ.	typ.	
C1V4	1,16		1,34	-4	60	
C2V1	1,75		2,05	-6	90	
C2V8	2,33		2,70	-8	120	
C3V6	3,02		3,45	-10	150	
	at $I_F = 10\text{ mA}$			at $I_F = 10\text{ mA}$		
	min.	nom.	max.	typ.	typ.	max.
C1V4	1,33	1,40	1,47	-3,3	6	10
C2V1	1,99	2,10	2,21	-5,0	9	15
C2V8	2,66	2,80	2,94	-6,6	12	20
C3V6	3,42	3,60	3,78	-8,2	15	25

Reverse current

$V_R = 5\text{ V}$

BZX75-C1V4	}	$I_R < 500\text{ nA}$
BZX75-C2V1		
BZX75-C2V8	}	$I_R < 200\text{ nA}$
BZX75-C3V6		

Recovered charge when switched from

$I_F = 10\text{ mA}$  to  $V_R = 5\text{ V}$ ;  $R_L = 500\ \Omega$

$Q_s > 600\text{ pC}$

Diode capacitance

$V_R = 0$ ;  $f = 1\text{ MHz}$

$C_d < 250\text{ pF}$

T-11-21

