

TRANSIENT SUPPRESSOR BRIDGES

Plastic encapsulated bridge assembly comprising four silicon double diffused transient suppressor diodes. It is specifically intended for use as line polarity guard and transient protection element in telephony equipment, and as suppressor element in electrical and electronic equipment in general.

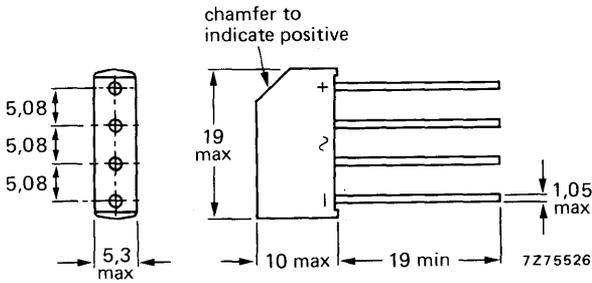
QUICK REFERENCE DATA

			BZW10-12		15
Input stand-off voltage	V_I	max.	12	15	V
Output clamping voltage	$V_{O(CL)}$	<	30	34	V
Non-repetitive peak clamping current	$I_{(CL)SM}$	max.	50	40	A
Output voltage	V_O	>	10	13	V

MECHANICAL DATA

Dimensions in mm

Fig. 1 SOD-28



The sealing of the plastic envelope withstands the accelerated damp heat test of IEC recommendation 68-2 (test D, severity IV, 6 cycles).

RATINGS

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

		BZW10-12		15		
Input stand-off voltage (note 1)	V_I	max.	12	15		V
Average output current (averaged over any 20 ms period)	$I_O(AV)$	max.	150	150		mA
Non-repetitive peak clamping current full load prior to surge (see note 2)	$I_{(CL)SM}$	max.	50	40		A
→ Storage temperature	T_{stg}		-55 to +150			°C
→ Operating ambient temperature	T_{amb}		-25 to +85			°C

THERMAL RESISTANCE

From junction to ambient $R_{th j-a} = 60 \text{ } ^\circ\text{C/W}$

CHARACTERISTICS

→ $T_{amb} = -25 \text{ to } +85 \text{ } ^\circ\text{C}$

Output voltage $V_I = V_{I\max}; I_O = 10 \text{ mA}$	V_O	>	10	13		V
Output clamping voltage at $I_{(CL)SM}$ at rated load conditions	$V_O(CL)$	<	30	34		V
Leakage current $V_I = V_{I\max};$ at rated load conditions	I_R	<	40	40		μA

MOUNTING INSTRUCTIONS

1. The maximum permissible temperature of the soldering iron or bath is 270 °C; it must not be in contact with the joint for more than 3 seconds.
2. Avoid hot spots due to handling or mounting; the body of the device must not come into contact with or be exposed to a temperature higher than 150 °C.
3. Exert no axial pull when bending the leads.

Notes

1. The stand-off voltage is the maximum bridge input voltage permitted for continuous operation.
2. In accordance with F.T.Z. requirement 10/700 with 2 kV test voltage: BZW10-12 and 1.6 kV: BZW10-15 (see also page 3).

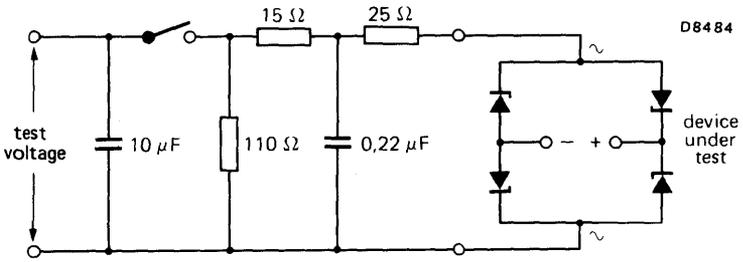


Fig. 2 Test set-up in accordance with F.T.Z. 10/700

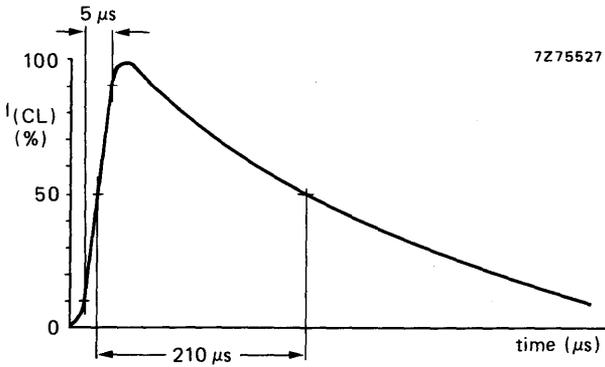


Fig. 3 Output clamping current as a function of time.