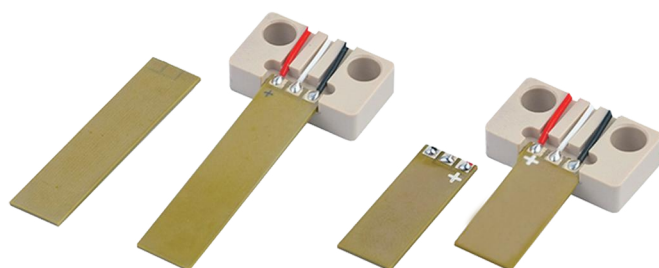


## Piezo Bender Actuator



### Features

- AC lifetime:  $10^9$  cycles
- Microsecond-level response
- Vacuum compatible up to  $10^{-6}$ Pa
- Operating voltage: -20 to +150V
- Curie temperature: 230°C

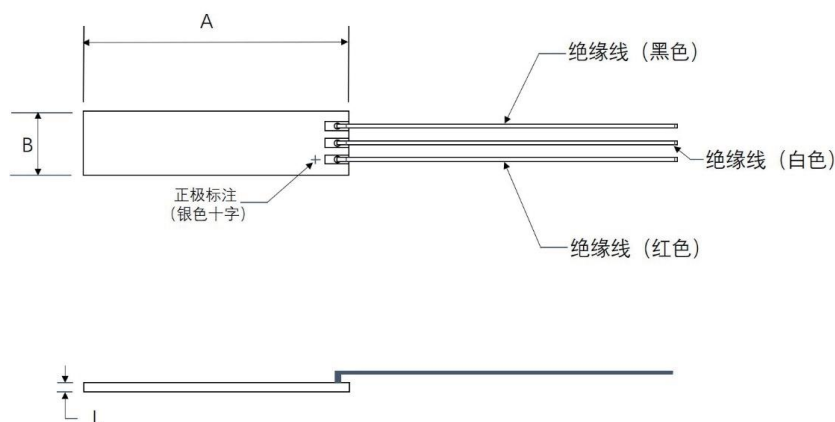
### Applications

- Laser technology and laser beam control
- Medical technology
- Printing technology
- Acceleration transducer
- Fibre channel switch

### Description

Piezo Bender Actuator, made by co-firing multiple layers of piezoelectric ceramics, and can independently control the drive voltage of each layer of ceramics. The free end can bend to produce displacement, the amplitude and direction of displacement are functionally related to the applied voltage. The product specifications and performance parameters are benchmarked against the level of international companies, and mass production has been achieved.

### Interface Definition



General dimension, Unit: mm

H

## Technical Specifications

	PAA-B20-08W	PAA-B32-08W	Unit	Tolerance
Active axes	Z	Z		
Max. displacement	±135	±450	μm	±15%
Displacement hysteresis	<15%	<15%		
Load capacity	1.4	1.5	N	Max. value
<b>Electrical properties</b>				
Operating voltage	0-150	0-150	V	
Resonant frequency	930	350	Hz	Max. value
Dielectric loss	<2.0%	<2.0%		
Electrical capacitance	145/unilateral	550/unilateral	nF	±15%
<b>Miscellaneous</b>				
Operating temperature range	-25~130	-25~130	°C	
Electrode	Silver	Silver		
Cable length	75	75	mm	±5 mm
Curie temperature	230	230	°C	
<b>Dimensions</b>				
A	20	32	mm	±0.5 mm
B	8	7.8	mm	±0.1 mm
L	0.8	0.8	mm	±0.1 mm
MTTF	27.29	1.9	year	

\*Displacement test: drive voltage range 0 to 150V, tolerance ±20%

\*\*Thrust test: drive voltage range 0 to 150V

\*\*\*Capacitance test conditions: ambient temperature environment, 1Vpp, 1kHz, tolerance ±20%

\*\*\*\* MTTF test conditions: 150V, 85% humidity, 85°C environment

Standard wiring harness, length 75mm, AWG32, PTFE insulation

Pre-installed PCB version available, followed by 'S' in the product code

Other specifications can be customized on request.