



# Product specification

The DCSA3-R10H50P38 is an integrated structure composed of a piezoelectric ceramic stack, a flexible hinge support structure, and a housing structure. It can achieve a displacement of up to 38.0  $\mu m$ . The electrodes are led out through a coaxial shielded cable, and the moving cap end, fixed base, and connector can be customized.



DCSA3-R10H50P38

#### **Performance Parameters**

Drive Voltage Range	0~150 V	Capacitance	$1.2\mu F\pm 15\%$
Displacement (Free Stroke) at 150 V	$38.0~\mu m \pm 15\%$	Dissipation Factor	<5.0%
Hysteresis	<15%	Connection Cable	RG-178
Tensile Force	50 N	Blocking Force at 150 V	310N
Curie Temperature	230 °C	Operating Temperature	-25 ~ 130 °C
Product Size	Outer Diameter: 10.0±0.03mm H: 50.0±0.5mm	Customizable	Connection cable, housing, connector, etc.

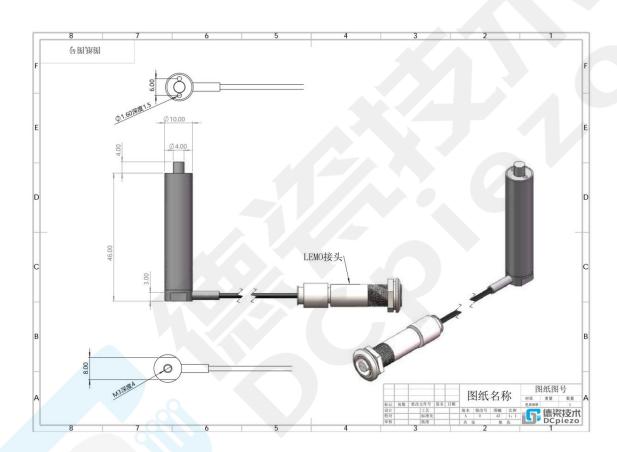
- All specifications are quoted at 25°C, unless otherwise stated.
- The displacement may vary slightly for different loads, and the maximum displacement occurs when used with the recommended load.





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#### **Product Size**



#### **Performance Curve**

(The performance curve is based on actual measurements. The performance curve for customized products will be updated after production is completed.)

• These temperature rises were measured after applying a sine-wave drive voltage ranging from 0 to 150V at the specified frequency for 10 minutes.

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#### **Matters Needing Attention**

- 1. The piezoelectric actuator contains a piezoelectric stack inside, and the electrodes of the piezoelectric stack are led out through a coaxial shielded cable. The connector is a LEMO connector.
- 2. The piezoelectric ceramic actuator should be stored in vacuum packaging, and the discharge resistor should remain connected during storage.
- 3.Do not immerse the piezoelectric stack in organic solvents or expose it to flammable gases or liquids.
- 4.Do not disassemble the piezoelectric actuator.
- 5. Handle with care to avoid dropping, as the piezoelectric ceramic actuator is prone to breaking.