

PRESS RELEASE
27 November 2013

P-080 PICMA® Stack Multilayer Ring Actuator

With the new ring actuator, composed of annular PICMA® chip multilayer piezo actuators, dimensions and travel ranges can be flexibly scaled.

For initial sampling or small quantities, **PI Ceramic** offers multilayer actuators that consist of PICMA chip actuators. These miniature piezo actuators, come in different dimensions and geometries and are glued together as required for the dimensions or travel ranges. Thus, special lengths for the PICMA multilayer actuators can be scaled quickly and flexibly - resulting in short delivery times. The gluing procedure does not impair the high reliability and long lifetime of the PICMA actuators.

The P-080 ring actuator is the first standard product of this series and consists of annular PICMA chip actuators. At 36 mm length, it offers a travel range of 25 µm. Ring actuators achieve their maximum deflection already at low operating voltages of only 100 V. Here the resonant frequency of 40 kHz is very high which makes the actuator perfectly suitable for highly dynamic processes. As all PICMA multilayer actuators, also P-080 have response times in the µs-range and sub-nanometer resolution.

THE INTEGRATION: ALL-ROUND PERFECTION

The round outer diameter fits perfectly into pre-manufactured case components made from semi-finished tubes, for example. The inner hole can be used as aperture for optical applications or for applying a preload for dynamic applications.

At an outer diameter of 8 mm, the P-080 has an inner hole diameter of 4.5 mm.

Design and production are very flexible, because all annular PICMA chip actuators, with diameters 5, 8 and 15 mm, can be used for creating ring actuators.

Consequently these high-power actuators are especially suitable for being used in laser tuning, microdosing and life science applications.

For more information, contact **Warsash Scientific** on +61 2 9319 0122 or sales@warsash.com.au.

