dm2 high frequency vibration exciter



Application

dm2 is specially designed for the demands of high frequency vibration testing. The vibration exciter makes use of the piezoelectrical effect. Due to the unique modular design different exciter setups are possible. So one can use the basic exciter in different mechanical configurations (e.g. parallel / serial) to adjust the exciter performance to the testing demand.

Features

- Miniature and powerful 100 N in a size of a thumb
- · Unique modular design for flexible operation
- Automotive approved high life cycle under extended operation temperature
- Operation with conventional power amplifier



Technical Data

- Maximum force: 100 N / 300 N (continuous / intermitted)
- Lower frequency: typical 2 kHz 8 kHz (depending on reaction mass and fixture / DUT)
- Upper frequency: typical 40 kHz (free of resonances)
- Power requirement: approx. 12 V pk; 4 A pk (100 N)
- Operation temperature: -40 °C up to 120 °C
- Mechanical Interfaces: M6 x 1 thread / stud
- Size of basic actuator: 45 mm x 13 mm (length x diameter)

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One actuator / one reaction mass

- Force: 100 N continuous (300 N intermitted)
- Resonant frequency (200 gram payload): 4 kHz
- Max. Displacement: 3 μm (pk-pk)



Two actuators in series / two reaction masses

- Force: 100 N continuous (300 N intermitted)
- Resonant frequency (200 gram payload): 2 kHz
- Max. Displacement: 10 µm (pk-pk)



Four actuators in parallel / two reaction masses

- Force: 400 N continuous (1,2 kN intermitted)
- Resonant frequency (200 gram payload): 7 kHz
- Max. Displacement: 3 μm (pk-pk)

