

Compact Piezo Amplifier / OEM Module

Cost-Effective, Low-Noise Piezo Amplifiers for Dynamic Piezo Actuator Operation



E-836

- OEM module and benchtop device
- Peak current up to 100 mA
- Easy integration
- Power on/off without voltage spikes
- 24 V operating voltage

Single-channel piezo amplifier: OEM module or benchtop device

Compact OEM module in shielded metal housing; easy integration with soldering pins for mounting on boards; ideally suited for assembling multi-channel solutions. Benchtop device for laboratory applications and fast startup. 24 V operating voltage, piezo voltage and other supply voltages are generated internally.

Functions

Low-noise power amplifier. Gain value 10. Output voltage range -30 to 130 V. Short-circuit proof, full overcurrent and overtemperature protection.

Fields of application

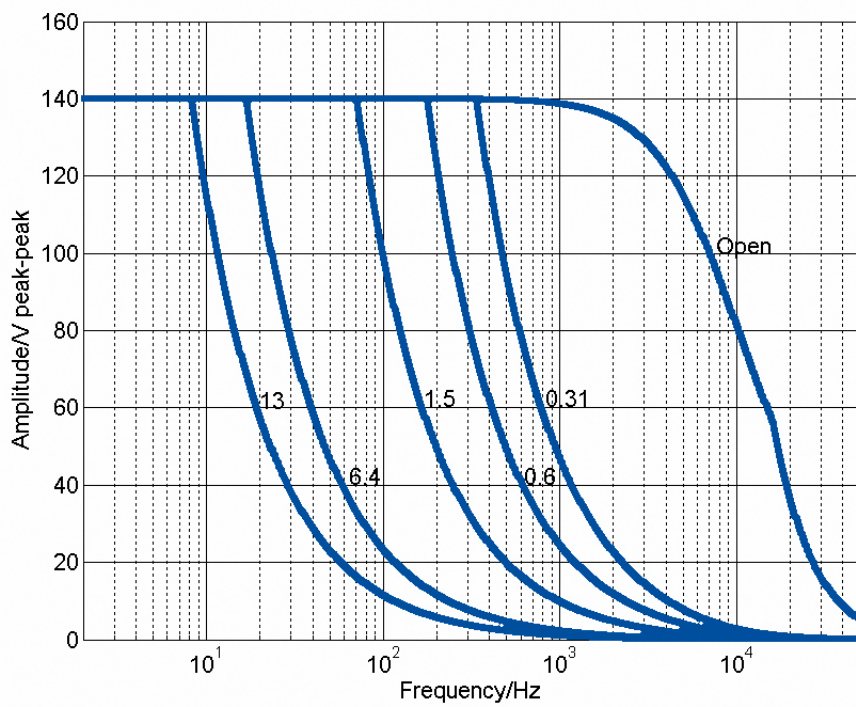
Inexpensive control of PICMA® Stack or PICMA® Chip piezo actuators in OEM applications.

Specifications

	E-836.03	E-836.1G
Function	Piezo amplifier, OEM module	Piezo amplifier, benchtop device
Channels	1	1
Amplifier	E-836.03	E-836.1G
Input voltage range	-2 to 12 V	-2 to 12 V
Output voltage	-30 to 130 V	-30 to 130 V
Peak current (<8 ms)	100 mA	100 mA
Average output current	50 mA	50 mA
Current limitation	Short-circuit proof	Short-circuit proof
Voltage gain	10 ±0.1	10 ±0.1
Ripple, noise, 0 to 100 kHz	0.8 mV _{rms}	0.8 mV _{rms}
Capacitive base load (internal)	10 nF	10 nF
Output impedance	5 Ω	5 Ω
Input impedance	0.5 MΩ	1 MΩ
Miscellaneous	E-836.03	E-836.1G
Connectors	Soldering pins, Ø 0.7 mm	BNC, LEMO Barrel connector (power adapter) 1-turn potentiometer, adds 0 to 10 V to the input voltage
Operating temperature range	5 to 50 °C	5 to 50 °C
Overtemperature protection	Deactivation at 85 °C	Deactivation at 85 °C
Operating voltage	24 V DC ±10 %	24 V DC ±10 %, in the scope of delivery: External power adapter with 24V / 2.0 A
Power consumption (max.)	10 W	16 W
Current consumption (max.)	0.5 A	0.65 A

Ask about customized versions.

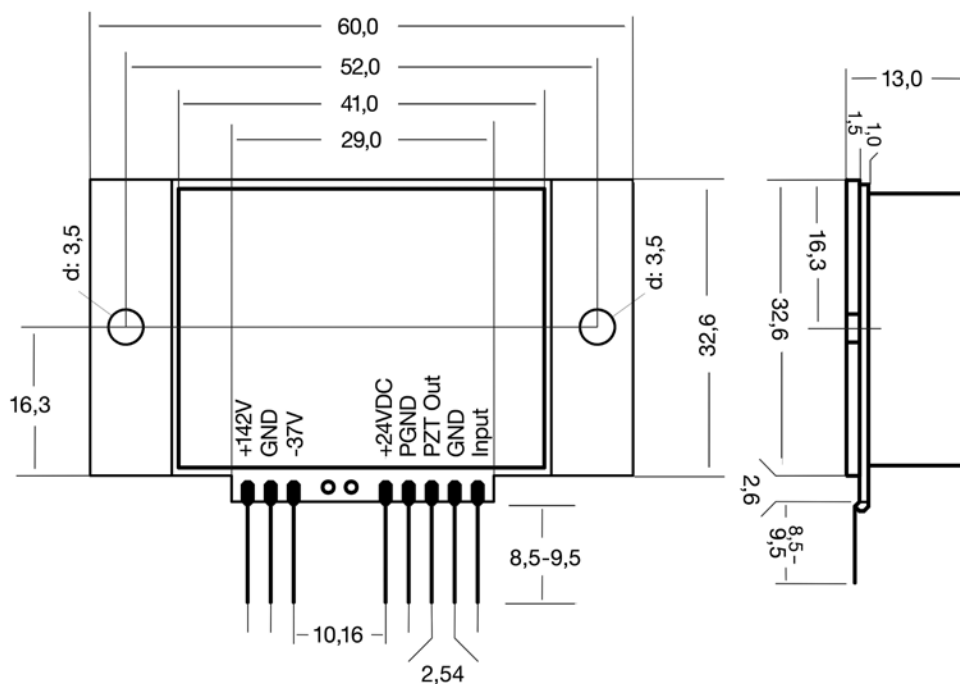
Drawings / Images



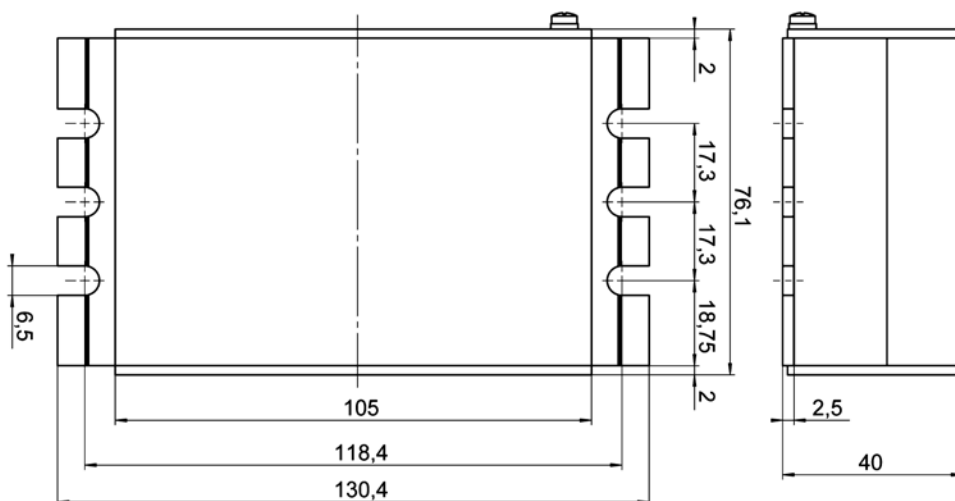
E-836: Operating limits (open loop) with various piezo loads, capacitance values in μF



E-836.1G: Benchtop device



E-836.03, dimensions in mm



E-836.1G, dimensions in mm

Ordering Information

E-836.03

Piezo amplifier, 1 channel, OEM module, -30 to 130 V, operating voltage 24 V

E-836.1G

Piezo amplifier, 1 channel, benchtop device, -30 to 130 V, operating voltage 24 V