

Q-Motion® Piezo Motor Drive Electronics, OEM Board

Easy and Inexpensive Integration into OEM Applications



E-872

- Easy to integrate
- Compact design
- Versatile and inexpensive
- Can be used for all Q-Motion® stages

Compact driver module for piezo inertia drives

1 channel. Compatible with all Q-Motion® stages. Easy control via TTL signals for step and direction. 20 kHz step frequency for the highest dynamics.

Full and microstep variants

Microstep variants with 8-bit resolution for the highest precision or full step variant for particularly easy integration and low voltage drop. External temperature monitoring by integrated sensor via SMBus. Low current consumption at rest.

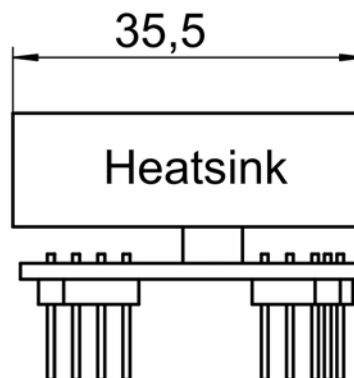
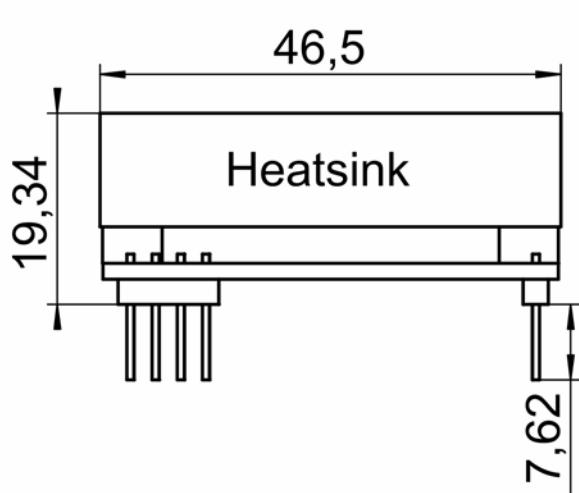
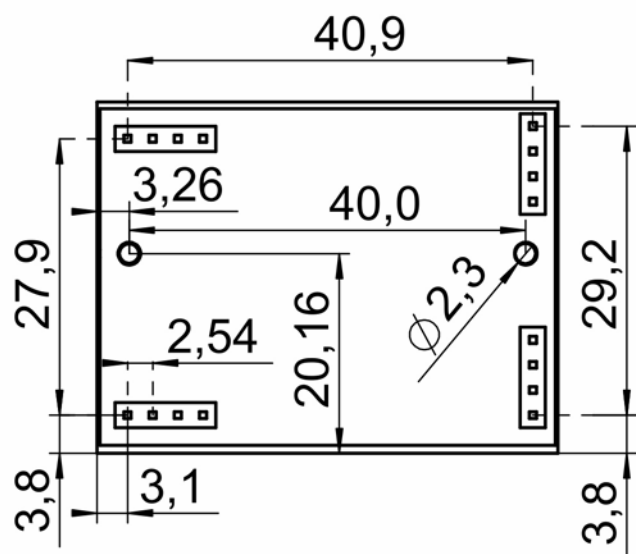
Specifications

	E-872.01	E-872.02
Function	Driver module for Q-Motion® piezo inertia drives, OEM board with solder pins, for full step operation	Driver module for Q-Motion® piezo inertia drives, OEM board with solder pins, for microstep operation
Drive type	Piezo inertia drive	Piezo inertia drive
Channels	1	1
Amplifier	E-872.01	E-872.02
Control in	TTL signals for steps and motion direction	TTL signals for steps and motion direction
Maximum full step frequency	20 kHz	20 kHz (corresponds to 5.1 MHz microstep frequency)
Microsteps per full step	–	256
Electrical properties	E-872.01	E-872.02
Max. output current (<8 ms)	600 mA	600 mA
Current limitation	Short-circuit proof	Short-circuit proof
Output voltage	0 to 48 V	0 to 48 V
Interfaces and operation	E-872.01	E-872.02
Control connection	Pin header, 4-pin	Pin header, 4-pin
Motor connection	Pin header, 4-pin	Pin header, 4-pin
Temperature sensor connection	Pin header, 4-pin	Pin header, 4-pin
Voltage connection	Pin header, 4-pin	Pin header, 4-pin
Supported functions	Temperature monitoring via SMBus	Temperature monitoring via SMBus
Miscellaneous	E-872.01	E-872.02
Operating voltage	48 V DC	48 V DC
Max. current consumption	0.62 A	0.62 A
Operating temperature range	5 to 50 °C	5 to 50 °C
Mass	39 g	39 g
Dimensions	46.5 mm × 35.5 mm × 24.84 mm (with pin headers)	46.5 mm × 35.5 mm × 24.84 mm (with pin headers)

Ask about customized versions.

Drawings / Images

Footprint (Bottom View)



E-872, dimensions in mm

Ordering Information

E-872.01

Q-Motion® Piezo motor drive electronics for complete motion cycles, 1 channel, 48 V output voltage, OEM board

E-872.02

Q-Motion® Piezo motor drive electronics for microstep operation with 8-bit resolution, 1 channel, 48 V output voltage, OEM board