

Module type Piezo Driver

PZM Series

1130-01A-1



FEATURES

- Compact module type and ideal for integrating into equipment
- Low ripple
- High stability
- Equipped with over current protection circuit

SUMMARY

This is a compact module-type, high-voltage power supply designed for driving piezo device. Output can be controlled by external signal and there is a complete protection circuit to prevent damage to piezo.

LINEUP

Output voltage (Vdc)	Rated output current I _{ave} *1 (mA _{ave})	Peak output current I _p less than 10ms (mA)	MODEL	Frequency response				Output resistor (Ω)
				Sine wave (-3dB)		Rise time (approx. value with 1μF load) *2		
				RL resistive load	1μF load	ΔV=100V	0 to Max V	
0 to 100	30	42	PZM-0.1P	DC to 10kHz	DC to 130Hz	2.4ms	2.4ms	51
0 to 150	20	28	PZM-0.15P	DC to 6kHz	DC to 60Hz	3.6ms	5.4ms	100
0 to 300	10	14	PZM-0.3P	DC to 3kHz	DC to 15Hz	7.2ms	30ms	200
0 to 600	6.6	9	PZM-0.6P	DC to 2kHz	DC to 5Hz	15.5ms	94ms	300
0 to 1K	3.3	4.5	PZM-1P	DC to 2kHz	DC to 1.5Hz	31ms	311ms	500

*1: Output current at DC is 50% of rating current.

*2: Calculated from peak output current value (10ms or less can be output) ($Tr=C \cdot Vp-p/Ip$).
Calculated from $Tr=Tr \cdot Ip/Iave$ when calculated value of Tr exceeds the time in which peak current can be output (10ms).

SPECIFICATIONS

Input voltage current	24Vdc±5%, 0.4A _{typ} .
Output voltage control	External control voltage V _{con-in} =0V to +10V <small>Note 1)</small> (Input impedance more than 10kΩ)
Regulation	±0.1% (for 24V±5% input change) <small>Note 2)</small>
Ripple	Less than 0.02%p-p (with 50nF load at maximum output voltage)
Stability	0.02%/H <small>Note 2)</small>
Temperature coefficient	0.02%/°C <small>Note 2)</small>
Protection circuit	Input reverse connection, intermittent output short-circuit <small>Note 3)</small> , output over, current
Input/output terminal processing	Input : pin terminal Output: 50cm(1.6ft) high voltage lead wire
Operation temperature	0°C to 45°C
Storage temperature	-40°C to 85°C
Humidity	20 to 80%RH(no condensation)

Note 1) Off-set voltage when V_{con-in}=0V is less than ±0.5% of rating output or less than ±1V.

Note 2) Value of resistive load maximum rating voltage in DC operation.

Note 3) One short circuit must be less than 5 seconds and not continuous. Do not repeat short circuits as this shortens lifetime of the product. We recommend PZJ series for applications with intermittent short circuits.

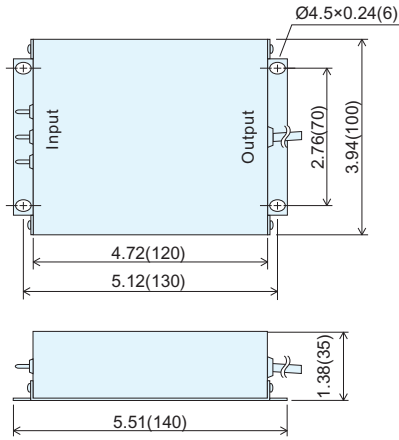
* Please note that module-type products do not come with instruction manual.

OPTION

-L2 Output voltage monitor

1V/100V for types of up to 300V of output voltage, 1V/1kV for types of 600V or more. Please measure by voltmeter of 10MΩ or more of input impedance for voltage monitor. (accuracy:±2.5% F.S.)

■ DIMENSIONS inch(mm)



■ CONNECTION DIAGRAM

