

# Piezopumpen + Treiber

Freitag, 29. Januar 2016 08:22

## Pumpe

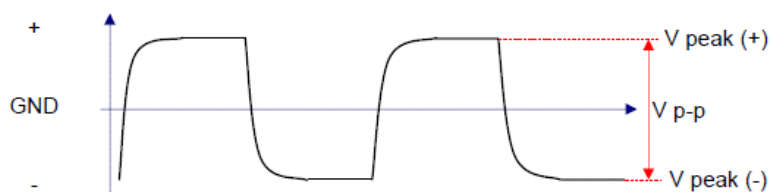
DRIVE METHOD	:	PIEZOELECTRIC ELEMENT
DRIVE VOLTAGE	:	60 ~ 250Vp-p (SINE OR TAKASAGO STANDARD WAVE FORM)
DRIVE FREQUENCY	:	10 ~ 60Hz
POWER CONSUMPTION	:	22mW (REFERENCE, STANDARD OPERATION CONDITION, OPERATION FREQUENCY : 40Hz) 32mW (REFERENCE, STANDARD OPERATION CONDITION, OPERATION FREQUENCY : 60Hz)

THE ABOVE SPECIFICATIONS ARE BASED ON THE FOLLOWING CONDITIONS

STANDARD OPERATING CONDITION	:	AMBIENT AND FLUID TEMPERATURE: 25°C FLUID MEDIA: PURE WATER OPERATING VOLTAGE: 250Vp-p (SINE WAVE) OPERATING FREQUENCY: 40Hz TUBING: I.D. 1/16in LENGTH 40mm
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### 6-1) Drive Signal Waveform

MPD-200A drives Takasago piezoelectric micro pumps with Takasago standard waveform.



The Pump Drive Output Voltage,  $V_{p-p}$ , means the distance between  $V_{peak(+)}$  and  $V_{peak(-)}$  in the diagram above. It is “the height between the hill top and the valley bottom of the output waveform.” Connect the GND terminal of your oscilloscope to the pin #1 High Voltage Out (-) of the MPD-200A, and the scope input terminal to the pin #5 High Voltage Out (+) and verify the actual waveform.

## Treiber:

MPD-200A											
Input Voltage	5 VDC $\pm$ 5 %										
Output Frequency	1 Hz to 60 Hz <span style="float: right;">Varies with signal input at F in</span>										
Output Voltage	50 Vp-p to 340 Vp-p <span style="float: right;">Varies with voltage input at V in</span>										
Drive Waveform	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">+</div>  </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="margin-right: 10px;">GND</div> <div style="margin-right: 10px;">-</div> <div style="text-align: right;">(Takasago Standard Wave)</div> </div>										
Can be used with	SDMP302 / 306 / 320										
Max. number of pumps	2										
Power Consumption	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Approx. 40 mW (Typical)</td> <td style="width: 50%;">Stand-by (SDMP302 x 1, at 60 Vp-p, Disabled)</td> </tr> <tr> <td>Approx. 85 mW (Typical)</td> <td>Stand-by (SDMP302 x 1, at 250 Vp-p, Disabled)</td> </tr> <tr> <td>Approx. 240 mW (Typical)</td> <td>In operation (SDMP302 x 1, at 250 Vp-p, 40 Hz)</td> </tr> </table>	Approx. 40 mW (Typical)	Stand-by (SDMP302 x 1, at 60 Vp-p, Disabled)	Approx. 85 mW (Typical)	Stand-by (SDMP302 x 1, at 250 Vp-p, Disabled)	Approx. 240 mW (Typical)	In operation (SDMP302 x 1, at 250 Vp-p, 40 Hz)				
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