

SHORT PULSE DRIVERS

FEATURES

- Short circuit protection at driver output
- Driver pad overheat sensor stops operation when overheated
- Overheat optocoupled output signal
- Switchable single pulse and two pulses control operation modes
- LED for error indication (overheat and short circuit)

CONFIGURATION EXAMPLES OF DP-SP SERIES SHORT-PULSE DRIVERS

CATALOGUE NUMBER OF DRIVER	DP-SP-50-3.6	DP-SP-250-3.6	DP-SP-600-2.5	DP-SP-250-3.6-AI	DP-SP-600-2.5-AI
Max / min HV operating voltage	3.6 kV / 1.8 kV	3.6 kV / 1.8 kV	2.5 kV / 1.25 kV	3.6 kV / 1.8 kV	2.5 kV / 1.25 kV
Maximal HV repetition rate ¹⁾	50 kHz	250 kHz	600 kHz	250 kHz	600 kHz
Pulse duration ²⁾	15 – 5000 ns	15 – 1250 ns	15-400 ns	15 – 1250 ns	15-400 ns
HV pulse rise time, typical	<7 ns	<7 ns	<6.5 ns	<7 ns	<6.5 ns
HV pulse fall time, typical	<7 ns	<7 ns	<6.5 ns	<7 ns	<6.5 ns
Output polarity	positive				
HV power consumption	<20 W	<75 W	<100 W	<75 W	<100 W
12V / 24V power consumption	1 W	4 W	7 W	4 W	7 W
Recommended HV power supply model	PS-40	PS-80	PS-120	PS-80	PS-120
Dimensions	see Fig. 12	see Fig. 13		see Fig. 14	
Cooling	conductive	water			

¹⁾ Upon request maximal HV repetition rate can be extended to 1000 kHz if output voltage is below 1.8 kV.

²⁾ Pulse regeneration technique not works with short pulse drivers.

Driver needs to be mounted on the heatsink (excluding water cooled versions). Heat sink temperature needs to be lower than 35 °C (95 °F) in all regimes of operation. Please specify working voltage and required tuning range by ordering. HV output voltage to Pockels cell is equal to HV power supply voltage.



OEM version of DP-SP series driver with general purpose pad

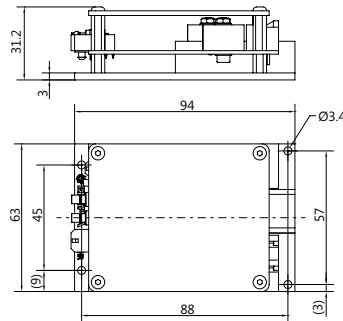


Fig. 12. Outline drawing of DP-SP series drivers with conductive pad

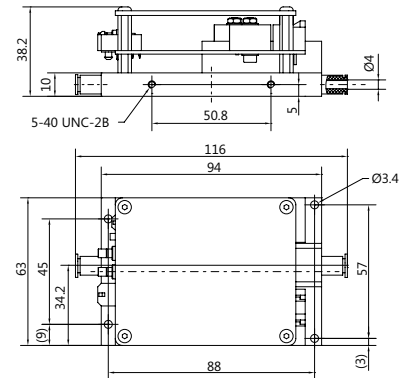


Fig. 13. Outline drawing of DP-SP series driver with general purpose pad



Encased version of driver DP-SP

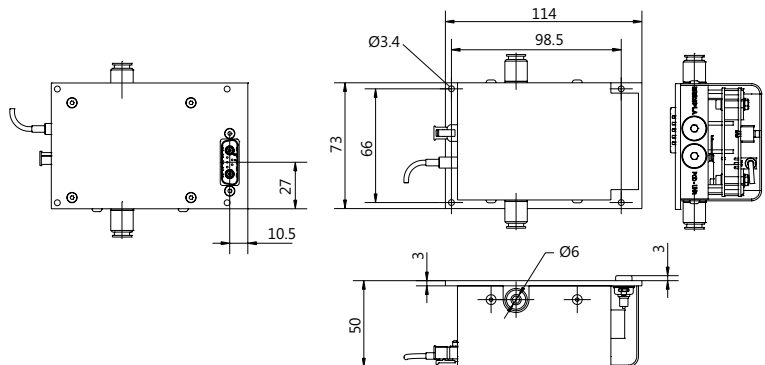


Fig. 14. Outline drawing of encased version of driver DP-SP

POCKELS CELLS

DRIVERS FOR POCKELS CELLS

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