

Mini High Voltage Modules ABC300-04CJZ

Description

The ABC series of DC/DC converters has been designed for optimum avalanche photodiode (APD) performance. The output voltage is precisely adjustable and highly stable and the temperature coefficient of the output voltage can be exactly adapted to the properties of the APD. Discrete APDs as well as APD modules with integrated temperature sensors can be controlled using the ABC series. The output current is limited to a safe level so that the APD is protected against overload. A precise reference voltage source is built in. The output voltage can be adjusted either with a simple potential divider or with an external control voltage. By means of an additional control voltage the amplification of the APD can either be adjusted with a closed loop or be precisely modulated. The device has a wide operating voltage range. A silicon diode is used as temperature sensor and is supplied.

Features

- Negative output voltage up to 300 V
- High accuracy < 0.2 %
- High stability < 0.01%
- Short-circuit proof
- Low ripple
- Compact shielded housing

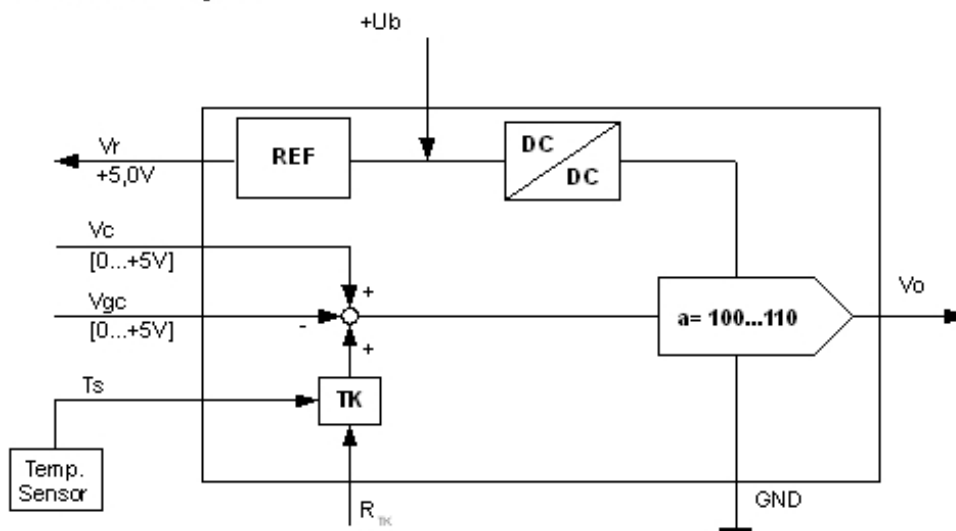
Technical Specifications

ABC series	ABC300-04CJZ
Operating voltage	+10 ... +15 VDC
Setting of amplifier	0 ... +5.0 VDC
Control voltage	0 ... +3.0 VDC
Reference voltage	+5.050 VDC
Temperature sensor	temperature dependent resistor*
Output voltage	-10 ... -300 VDC
Output current	max. 0.2 mA
Measures	40 x 40 x 10 mm
Weight	35 g

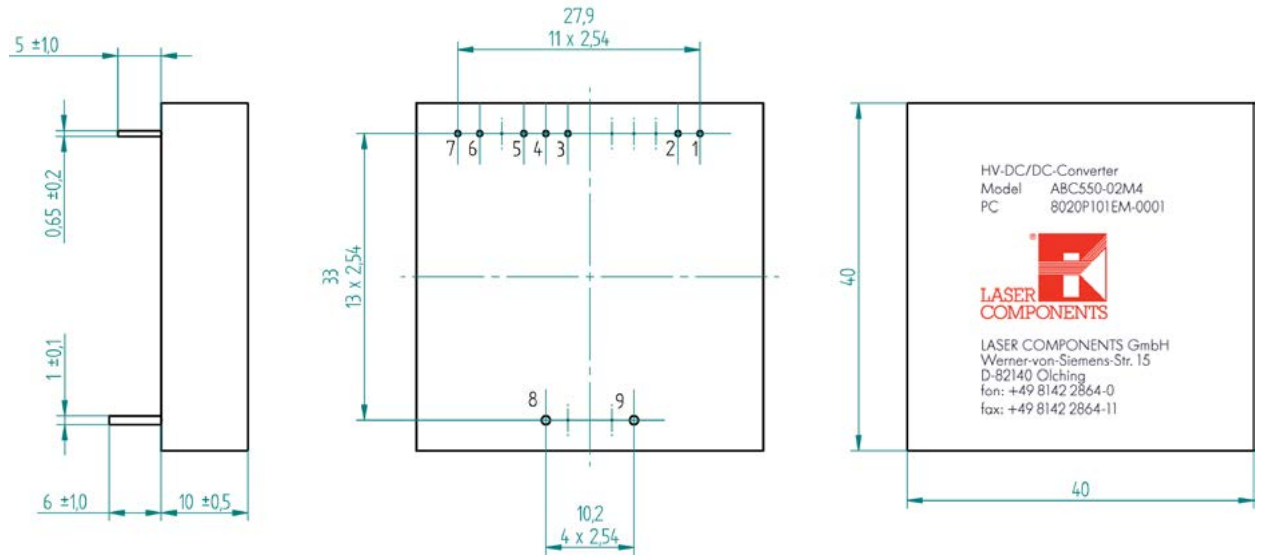
*i.e.: KTY 11-7, supplied with the module

Functional Diagram

Schematic diagram



Package Drawing



Bottom view

Connection Configuration

Pin	Name	Function	Characteristic
1	+VB	Supply voltage	+10 ... +15 VDC
2	VGC	Amplification calibration	0 ... +5.0 VDC
3	GND	Ground	-/-
4	VC	Control voltage	see page 2
5	VR	Reference voltage	+5.050 VDC
6	TS	Temperature sensor	
7	TC	TC calibration	
8	GND	Ground	
9	+VO	Output voltage	-10 ... -300 V

Product Changes

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Ordering Information

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