
Features

- Low ripple <10mVpp
- On-board reference source
- Easy adjustment
- Shielded, HF safe package
- up to -500 V maximum voltage

Description

Precision regulated power module for APD and PIN diodes with very low ripple.

Application

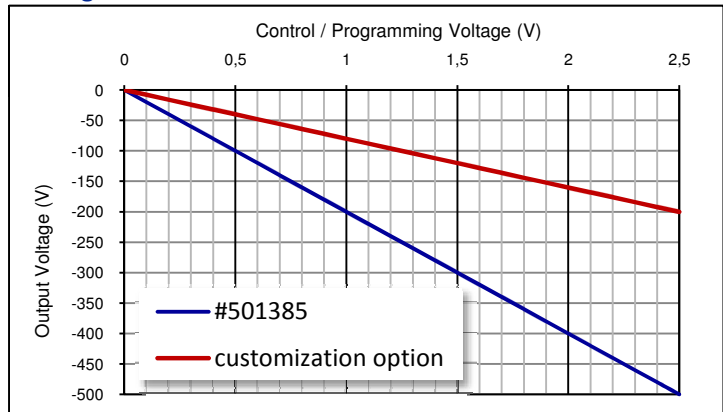
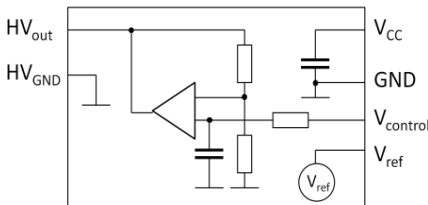
- High voltage for APD
- High voltage for PIN-PD

RoHS

2002/95/EC


Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T_{STG}	Storage temp	-10	125	°C
T_{OP}	Operating temp	-10	70	°C
V_{CC}	Supply Voltage	0	6	V

Voltage Control

Block diagram

Electrical characteristics @ 23°C

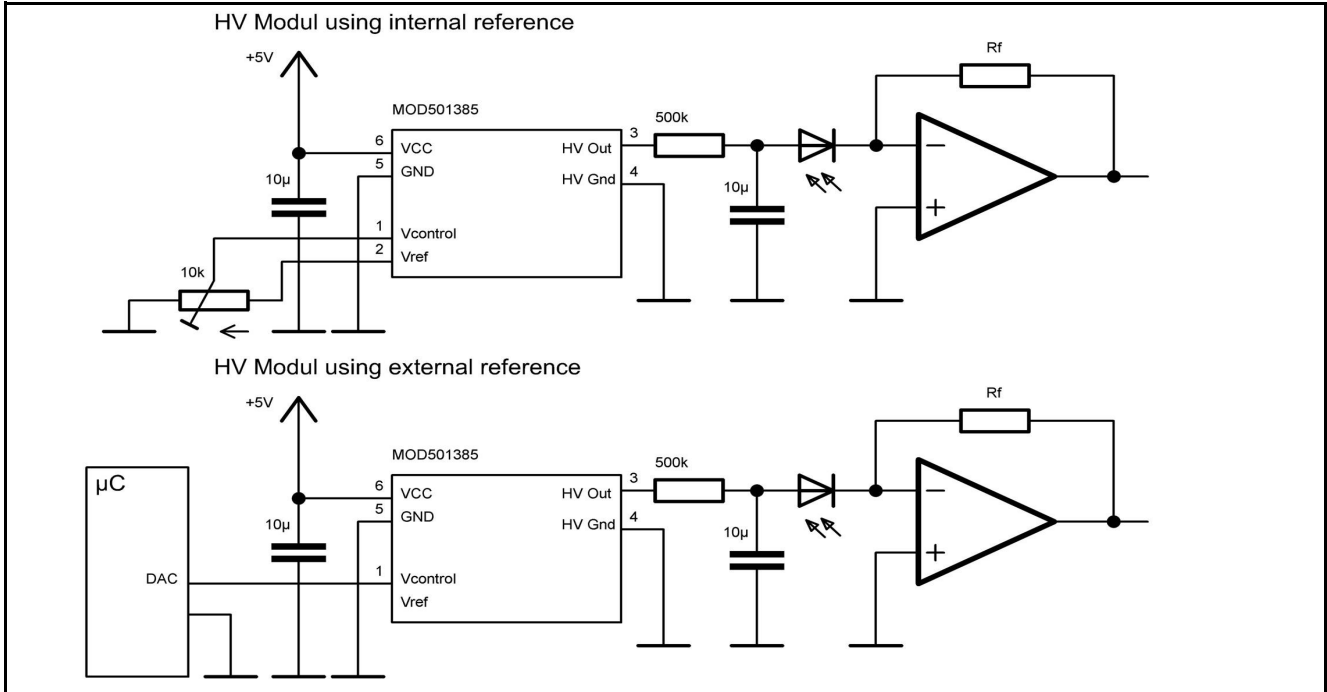
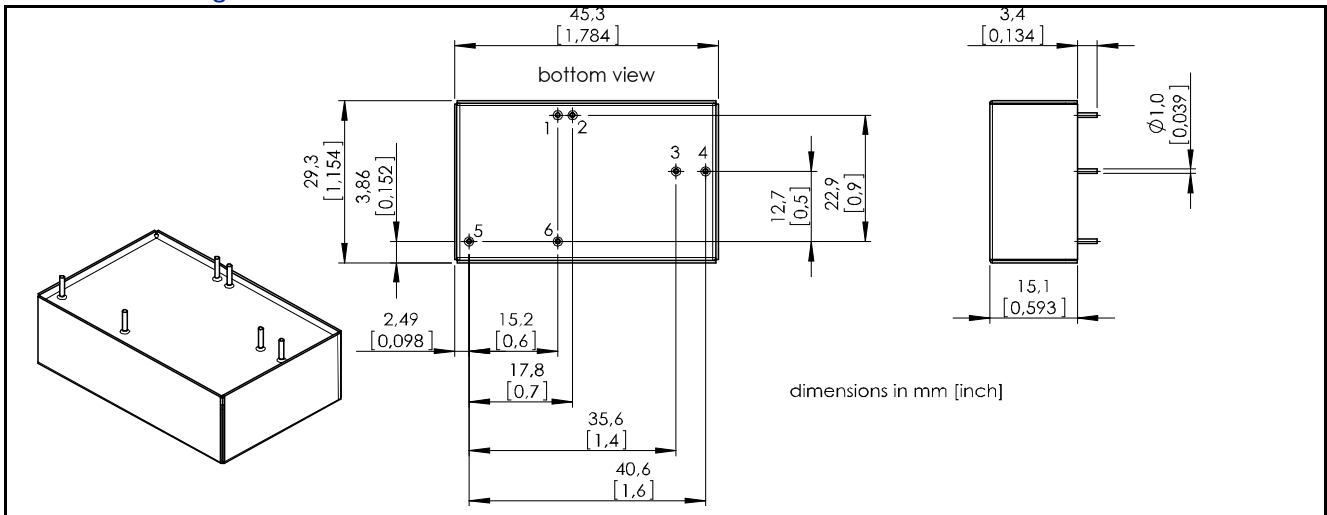
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
V_{CC}	Input voltage		+4.5		+5.5	V
	Input current w/o load	@ -500 V			70	mA
	Input capacitance			200		μ F
$V_{control}$	Control voltage		0		2.5	V
	Set point accuracy			1		%
	Deviation from linearity			0.5		%
V_{ref}	Reference output		2.475	2.5	2.525	V
T_K	Temperature coefficient				50	ppm/K
	Ripple	peak to peak		7.5	10	mVpp
	Short circuit protected				5	s
HV_{out}	Output voltage	order number 501385			-500	V
	Output current				1	mA

European, International Sales:


First Sensor AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 T +49 30 6399 2399
 F +49 30 639923-752
 sales.opto@first-sensor.com

USA:


First Sensor Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com

Application hints

Technical drawing

Mechanical characteristics

Parameter	Parameter	Unit
Length	45	mm
Width	29	mm
Height	15	mm
Volume	19.575	cm ³
Weight	45	g
Case material	Tinplate	

Pin connections

Part	Symbol	Function
1	$V_{control}$	Control voltage
2	V_{ref}	Reference output
3	HV_{out}	High voltage output
4	HV_{GND}	High voltage ground
5	GND	Ground
6	V_{CC}	Input voltage

Disclaimer: Due to our strive for continuous improvement, specifications are subject to change within our PCN policy according to JESD46C.

European, International Sales:


First Sensor AG
 Peter-Behrens-Strasse 15
 12459 Berlin
 Germany
 T +49 30 6399 2399
 F +49 30 639923-752
 sales.opto@first-sensor.com

USA:


First Sensor Inc.
 5700 Corsa Avenue #105
 Westlake Village
 CA 91362 USA
 T +1 818 706 3400
 F +1 818 889 7053
 sales.us@first-sensor.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

First Sensor:

[500V-HP-HV](#) [3001442](#)