

## PD10NG-XXXXZ2:1H30 3KV ISOLATED 2W REGULATED DUAL OUTPUT SIP8

### Electrical Specifications

(Typical at + 25°C , nominal input voltage, rated output current unless otherwise specified)

#### Input Specifications

Voltage range 4.5-9, 9-18, 18-36 and 36-72 VDC Wide Input  
 Filter Capacitor type

#### Isolation Specifications

Rated voltage 3000 VDC  
 Resistance >1 GΩ  
 Capacitance 72PF

#### Output Specifications

Voltage accuracy +/- 2 %, typ.  
 Ripple and noise (at 20 MHz BW) 100 mV p-p, max.  
 Short circuit protection Continuous, auto restart  
 Line voltage regulation +/- 0.2 % typ.  
 Load voltage regulation +/- 0.5 % typ. load = 10 ~ 100%  
 Temperature coefficient +/- 0.02 % / °C

#### General Specifications

Efficiency Continuous, auto restart  
 Switching frequency 75 KHz, typ.

#### Environmental Specifications

Operating temperature (ambient) - 40 °C to + 80 °C  
 Storage temperature - 55 °C to + 125 °C  
 Humidity Up to 90 %, non condensing  
 Cooling Free air convection

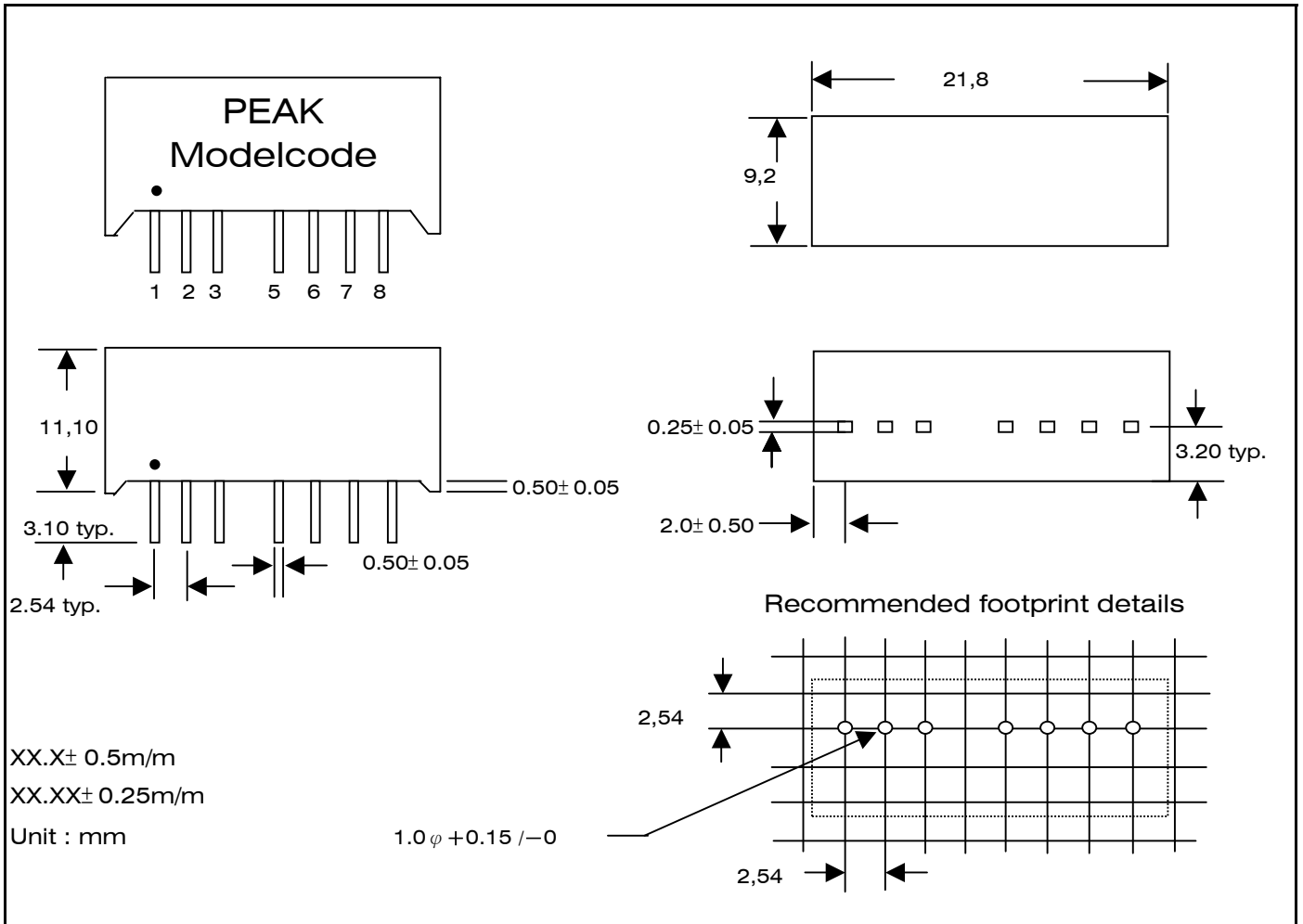
#### Physical Characteristics

Dimensions SIP 21.80 x 9.20 x 11.10 mm  
 Case material Non conductive black plastic

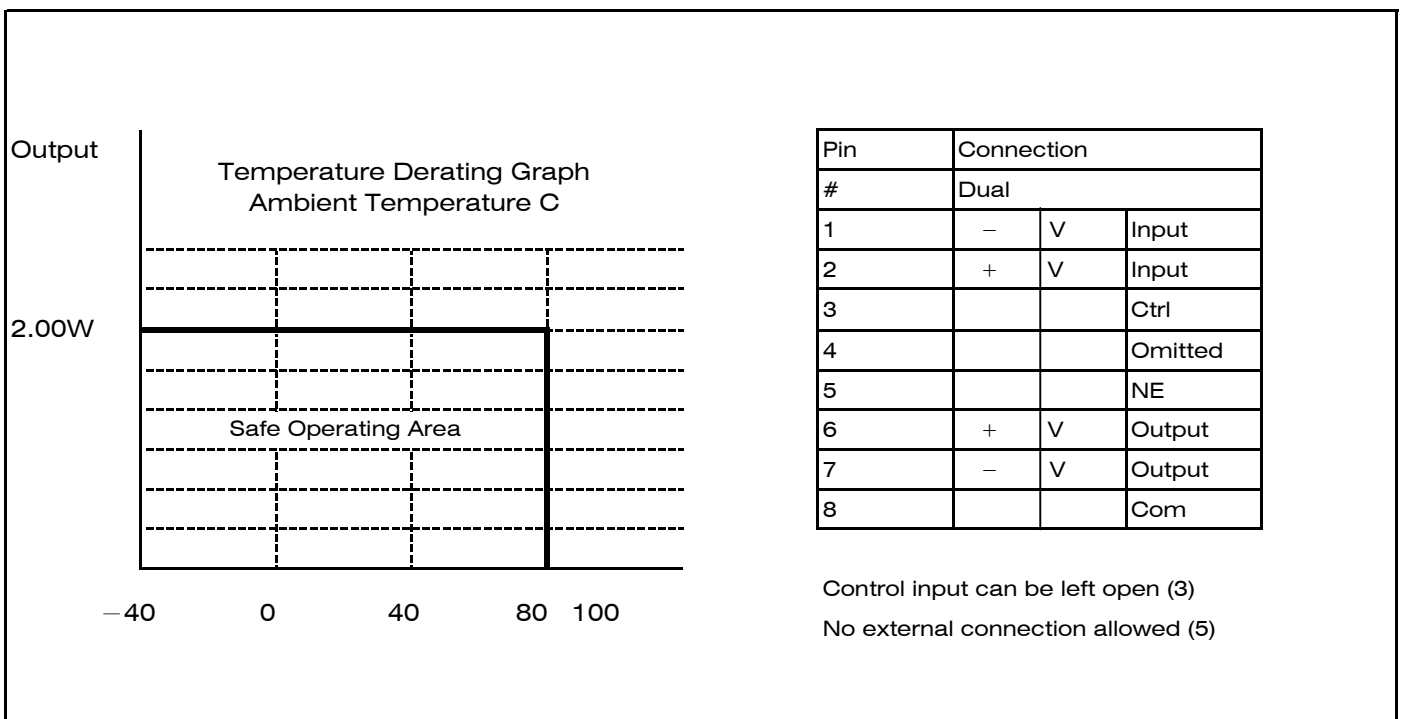
#### Samples of Partnumbers

PART NO.	INPUT VOLTAGE (VDC)	INPUT CURRENT NO LOAD (mA)	INPUT CURRENT FULL LOAD (mA)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (max.mA)	EFFICIENCY FULL LOAD (% TYP.)
PD10NG-053R3Z2:1H30	4.5 - 9	41	487	+/- 3.3	± 303	68
PD10NG-0505Z2:1H30	4.5 - 9	37	473	+/- 5	± 200	70
PD10NG-0509Z2:1H30	4.5 - 9	37	467	+/- 9	± 111	71
PD10NG-0512Z2:1H30	4.5 - 9	35	442	+/- 12	± 83	75
PD10NG-0515Z2:1H30	4.5 - 9	35	442	+/- 15	± 67	75
PD10NG-0524Z2:1H30	4.5 - 9	35	442	+/- 24	± 42	75
PD10NG-123R3Z2:1H30	9 - 18	24	237	+/- 3.3	± 303	70
PD10NG-1205Z2:1H30	9 - 18	23	227	+/- 5	± 200	73
PD10NG-1209Z2:1H30	9 - 18	22	213	+/- 9	± 111	76
PD10NG-1212Z2:1H30	9 - 18	22	213	+/- 12	± 83	78
PD10NG-1215Z2:1H30	9 - 18	22	213	+/- 15	± 67	78
PD10NG-1224Z2:1H30	9 - 18	22	213	+/- 24	± 42	78
PD10NG-243R3Z2:1H30	18 - 36	12	117	+/- 3.3	±303	71
PD10NG-2405Z2:1H30	18 - 36	12	109	+/- 5	± 200	76
PD10NG-2409Z2:1H30	18 - 36	12	108	+/- 9	±111	77
PD10NG-2412Z2:1H30	18 - 36	12	109	+/- 12	± 83	76
PD10NG-2415Z2:1H30	18 - 36	12	107	+/- 15	± 67	77
PD10NG-2424Z2:1H30	18 - 36	11	106	+/- 24	± 42	78
PD10NG-483R3Z2:1H30	36 - 72	8	58	+/- 3.3	± 303	72
PD10NG-4805Z2:1H30	36 - 72	6	54	+/- 5	± 200	77
PD10NG-4809Z2:1H30	36 - 72	7	53	+/- 9	± 111	78
PD10NG-4812Z2:1H30	36 - 72	6	52	+/- 12	± 83	80
PD10NG-4815Z2:1H30	36 - 72	6	52	+/- 15	± 67	80
PD10NG-4824Z2:1H30	36 - 72	6	52	+/- 24	±42	80

**Dimensions**

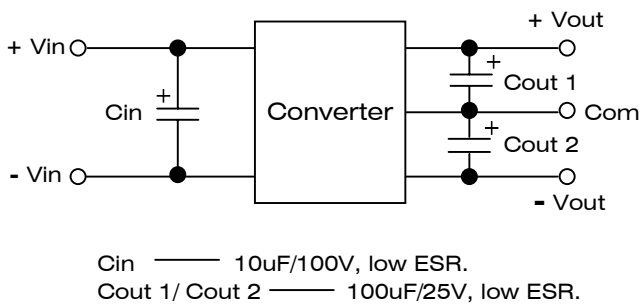


**Derating Graph and Pinning**



### External capacitance:

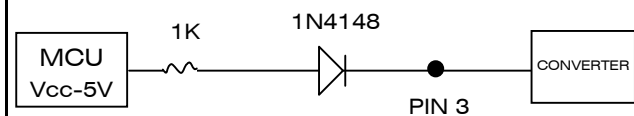
These converters will work with without external capacitors but they are necessary in order to guarantee the full line load range. All parts have been tested using the following recommended values.



### Pin 3 (CTRL)

Control pin (ON/OFF)  
 Output starts at low or open and stops when high.  
 Voltage applied via a limiting resistor and switching diode. The converter is in a low power mode during the high level phase.

### Connection example



### Pin 5 (NE)

This pin is used internally and must have have no external connection.

### Application Notes

Pin 3: The outside control connection. This pin provides the converter output ON/OFF, and the control common is referred to negative input.

Pin 5: This pin belongs to the secondary side. It just avoids someone to reverses the primary and secondary.