TDK

DC to DC Converters

Conformity to RoHS Directive

Distributed Power Supplies for Systems, POL Converter

PM Series PMH Type

FEATURES

- Heat sink is not required.
- Variable output voltage(The same model can support a wide range of voltages).
- Remote ON-OFF function.
- Various protective functions(output overcurrent protection and overheat protection)
- It is a product conforming to RoHS directive.

PRODUCT IDENTIFICATION

PMH	-	AD	07R	P	V	H	D
(1)		(2)	(3)	(4)	(5)	(6)	(7)

(1) Type name
(2) Rated output voltage
Shows AD for "adjustable" that are adjustable over a wide range.
(3) Output current
(4) Remote control polarity
(P: Positive Logic, N: Negative Logic)
(5) This shows that this is a VRM (POL) product.
(6) Input voltage (M: 5V, H: 12V, W: Widerange)
(7) Shapes (D: SMD)

PART NUMBERS AND RATINGS

Part No.	Input voltage (V)	Output voltage (V)	Output current (A)*1	Maximum output power (W)*2	Efficiency (%)	Ripple noise Ep-p (mV)max.
PMH-AD16RPVMD	5	0.8 to 3.3	16	52.8	92	50
PMH-AD16RPVHD	12(10 to 14)	0.8 to 5.5	16	80	92	50
PMH-AD16RPVWD	12(6 to 14)	0.8 to 5.5	16	80	92.5	50
PMH-AD07RPVHD	12(10 to 14)	0.8 to 5.5	7	35	89	50
PMH-AD07RPVWD	12(6 to 14)	0.8 to 5.5	7	35	89	50

*1 Specifications are subject to change.
*2 Please note that the maximum output voltage will vary depending on the output voltage.

COMMON SPECIFICATIONS

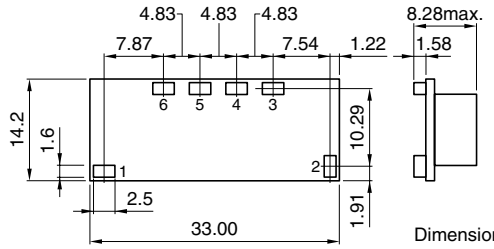
Start up time	3ms typ.
Overvoltage protection	No
Overcurrent protection	Yes(Automatic recovery)
Alarm output	No
Overheat protection	No
Remote ON-OFF	Yes(Only 16A type)
Remote sensing	Yes
Parallel operation	Impossible
Output voltage external variable function	Yes

Temperature range	Operating(°C)	–40 to +85 [Ambient temperature of the power supply]
	Storage(°C)	–40 to +125 [Ambient temperature of the power supply]
Humidity range	Operating(%)RH Storage(%)RH	10 to 95[Maximum wet-bulb temperature: 35°C, without dewing]
Vibration		10 to 500Hz, 1oct/min, 98m/s^2
Shock		980m/s^2, 6ms, 3times/axis

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

SHAPES AND DIMENSIONS

PMH16A D(SMD) TYPE

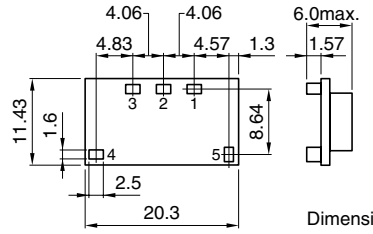


Dimensions in mm

TERMINAL CONNECTION

Terminal No.	Designations
1	Vin
2	Vctl
3	V_O sense
4	Trim
5	V_O
6	GND

PMH7A D(SMD) TYPE



Dimensions in mm

TERMINAL CONNECTION

Terminal No.	Designations
1	V_O
2	Trim
3	GND
4	Vin
5	Vctl

OUTPUT VOLTAGE SETTING METHOD

Setting the Output Voltage by Connecting the Resistance between the Trim Pin and GND Pin

$$Rex = \frac{10500}{V_O - 0.7525} - 1000 \qquad \text{Unit: } \Omega, \text{ V}$$

REMOTE ON/OFF

You can turn the output On and OFF by installing the switch (open collector equivalent) between the Vctl pin and GND pin.

Vctl Pin: Low Level → Output OFF

Open → Output ON