



PCB-MOUNT DC-DC CONVERTER ENCAPSULATED MODULES 40 WATTS SINGLE OUTPUT HDM40-S SERIES



FEATURES:

- SINGLE OUTPUT
- WIDE 4:1 INPUT RANGE
- 40W ISOLATED OUTPUT
- SIX-SIDED SHIELD

SPECIFICATION

INPUT SPECIFICATION

Input Range: Wide 4:1 DC input range.
See Ratings Chart.

Input Voltage: Nominal 24/48Vdc.

Input Current: Various with input range and load.
See Ratings Chart.

Input Fuse: Use external fuse.

Input Filter: Pi-Network.

Undervoltage Shutdown: Factory set.

Isolation Resistor: 1,000 Mega Ohms.

Isolation Voltage: 1,500Vdc.

EMI: Six-sided metal shielding.

Remote On/Off: TTL/CMOS-Compatible Input Control.
(Voltage refer to the -Input)

Positive Logic version for Standard set up:
ON(Enable)=Open(or 2.5-5.0Vdc above-Vin).
OFF(Disable)=Short(or 0-0.8Vdc above-Vin).
Negative Logic version option available by adding a
 "N" suffix to the end of Model #.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.

Output Current: See Ratings Chart.

Voltage Accuracy: Main O/P $\pm 2.0\%$ typical.

Line Regulation: Various with input & output voltages.
 $\pm 0.02\%$ typical.

Load Regulation: Various with output voltages.
 $\pm 0.06\%$ typical.

Noise & Ripple: Typical 1.0% peak to peak.

OVP: Built-in on main output.

Overload Protection (OLP):
 Fully protected against output overload and short circuit.
 OLP set at about 125-150% rating output wattage.
 Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typical 80-86%. (various with input/output)

Switching Frequency: Fixed frequency 230K Hz.

Circuit Topology: Forward Circuit.

Transient Response: Peak deviation 280mV,
Recovery time < 0.3mSec. at 25% step load change.

Case: Black coated copper with non-conductive metal base.

Power Density: 25 Watts. / Cubic inch.

Operating Temperature: -40 to +85°C range.
 0°C to +55°C full load without derating.
 From +55°C, derating linearly to half load at +80°C.
 (Refer to Derating Chart.)

Storage Temperature: -40°C to +85°C.

Cooling: Convection cooling(-40°C +55°C) at full load.

Humidity: Up to 95%RH, Non-condensing.

NOTE: (1) All measurements are at nominal input, full load, and +25°C unless otherwise specified.
 (2) Line Regulation measured from High to Low Lines at full load.
 (3) Load Regulation measured from Full Load to 1/2 Full Load at nominal input.
 (4) Correct fuse size by calculating the max. DC current drain at low Line input & Load and then adding 20-25 % for the desired fuse size.
 (5) Due to requests in market and advances in technology, specifications subject to change without notice.

INPUT/OUTPUT & VOLTAGE/CURRENT RATINGS CHART

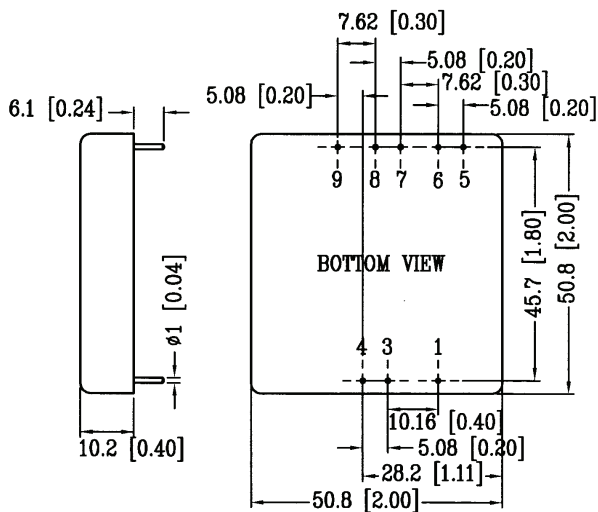
SINGLE OUTPUT

MODEL NO.	INPUT Vdc	INPUT CURRENT		OUTPUT VO1(Vdc) @★	OUTPUT VO1(A)
		N. L. (mA)	F.L.		
HDM40-24D-S03	9.0- 36.0	50	1700	3.3V	10.00A
HDM40-24D-S05	9.0- 36.0	10	2100	5.0V	8.00A
HDM40-24D-S12	9.0- 36.0	30	2000	12.0V	3.35A
HDM40-24D-S15	9.0- 36.0	30	1960	15.0V	2.66A
HDM40-48D-S03	18.0- 75.0	30	800	3.3V	10.00A
HDM40-48D-S05	18.0- 75.0	10	1040	5.0V	8.00A
HDM40-48D-S12	18.0- 75.0	20	1000	12.0V	3.35A
HDM40-48D-S15	18.0- 75.0	20	980	15.0V	2.66A

Symbols: "★" OVP built-in. "@ " Adjustable.

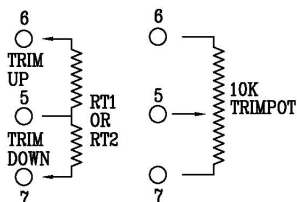
MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 156.0g (5.6 Oz.)



PIN ASSIGNMENT

PIN NO.	SINGLE
PIN #1.	Remote ON/OFF
PIN #2.	NO PIN
PIN #3.	-INPUT
PIN #4.	+INPUT
PIN #5.	OUTPUT TRIM
PIN #6.	DC COM
PIN #7.	+VO1
PIN #8.	+Remote Sense
PIN #9.	-Remote Sense



DERATING CHART

