

UP TO 20 WATTS - DC SERIES SURFACE MOUNT CONVERTER

FEATURES:

- Output trim function
- Overvoltage protection
- High efficiency (to 87%)
- Six sided shield
- Undervoltage lockout
- Remote on/off
- Short-circuit protection
- Safety approval (pending)



THE DC SERIES FROM WALL INDUSTRIES

The DC surface mount series offers the user a wide input range and single output with tight regulation. These converters are highly reliable and well suited for telecom applications.

SPECIFICATIONS: SERIES

All specifications apply at 25° C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltage Range.....36 to 75VDC
Input Filter.....LC Type

OUTPUT SPECIFICATIONS

Output Current.....see table
Voltage Accuracy.....±1%
Line Regulation (HL-LL)±0.2%
Load Regulation (10-100% load)
 Single Output.....±0.5%
Short Circuit Protection.....continuous auto recovery
Ripple/Noise (20MHz BW).
.....2, 3.3V 50mV, others 75mV p-p
Transient Response (25% load step).....500µ sec
External Trim Range.....±10% typ.

GENERAL SPECIFICATIONS

Efficiency.....see table
Isolation Voltage (input to output).....1600 VDC
Isolation Resistance (input to output)....10⁹ Ohms Min.
Switching Frequency.....300 kHz Typ.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature..-25° to +71°C (+85°C derating)
Storage Temperature.....-55°C to +105°C
Cooling.....Free air convection

PHYSICAL SPECIFICATIONS

Dimensions.....1.95 x 1.19 x 0.39 inches
Weight.....1 oz.
Shielding.....six-sided shield
Case Material.....non-conductive black plastic

Due to advances in technology, specifications subject to change without notice.

Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Efficiency	Model Number
36-75	2.0	4	81%	DC48S2.0-8
	3.3	4	83%	DC48S3.3-13
	5	4	87%	DC48S5-20
	12	1.67	87%	DC48S12-20
	15	1.33	87%	DC48S15-20

NOTES:

1. The recommended solder paste volume is 2.8 cubic mm (170,000 cubic mills/pin).
2. NC⁺ may be used for internal module and should not be connected by the customer.

PIN CONNECTIONS

1	Vo+
2	Vo-
3	N/C+
4	Trim
5	N/C+
6	N/C+
7	N/C+
8	On/Off
9	Sync (optional)
10	N/C+
11	V1-
12	V1+

Outline diagram

Dimensions are in millimeters and (inches).

Tolerances: x. $\pm 0.5\text{mm}$ (0.02 in); x. $\pm 0.4\text{ mm}$ (0.015in)