

FDD05 SERIES

DC-DC CONVERTER 5 ~ 6W



FDD05 - 05 S 1

WATTAGE

03 : 3.3V OUT
05 : 5V OUT
12 : 12V OUT
15 : 15V OUT

1: 9~18V IN
2: 18~36V IN
3: 36~72V IN
4: 9~36V IN
5: 18~72V IN
*: 20~60V IN

S : SINGLE OUTPUT

D : DUAL OUTPUT

*=BLANK

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (MIN.)	CASE
Single Output Models						
FDD05 - 05S	20~60 VDC	5 WATTS	+ 5 VDC	1000 mA	72%	FA
FDD05 - 12S	20~60 VDC	6 WATTS	+ 12 VDC	500 mA	72%	FA
FDD05 - 15S	20~60 VDC	6 WATTS	+ 15 VDC	400 mA	72%	FA
FDD05 - 05S1	9~18 VDC	5 WATTS	+ 5 VDC	1000 mA	63%	FA
FDD05 - 12S1	9~18 VDC	6 WATTS	+ 12 VDC	500 mA	68%	FA
FDD05 - 15S1	9~18 VDC	6 WATTS	+ 15 VDC	400 mA	68%	FA
FDD05 - 05S2	18~36 VDC	5 WATTS	+ 5 VDC	1000 mA	72%	FA
FDD05 - 12S2	18~36 VDC	6 WATTS	+ 12 VDC	500 mA	72%	FA
FDD05 - 15S2	18~36 VDC	6 WATTS	+ 15 VDC	400 mA	72%	FA
FDD05 - 05S3	36~72 VDC	5 WATTS	+ 5 VDC	1000 mA	72%	FA
FDD05 - 12S3	36~72 VDC	6 WATTS	+ 12 VDC	500 mA	72%	FA
FDD05 - 15S3	36~72 VDC	6 WATTS	+ 15 VDC	400 mA	72%	FA
FDD05 - 03S4	9~36 VDC	5 WATTS	+3.3 VDC	1500 mA	70%	FA
FDD05 - 05S4	9~36 VDC	5 WATTS	+ 5 VDC	1000 mA	72%	FA
FDD05 - 12S4	9~36 VDC	6 WATTS	+ 12 VDC	500 mA	72%	FA
FDD05 - 15S4	9~36 VDC	6 WATTS	+ 15 VDC	400 mA	72%	FA
FDD05 - 03S5	18~72 VDC	5 WATTS	+3.3 VDC	1500 mA	70%	FA
FDD05 - 05S5	18~72 VDC	5 WATTS	+ 5 VDC	1000 mA	72%	FA
FDD05 - 12S5	18~72 VDC	6 WATTS	+ 12 VDC	500 mA	72%	FA
FDD05 - 15S5	18~72 VDC	6 WATTS	+ 15 VDC	400 mA	72%	FA



MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (MIN.)	CASE
Dual Output Models						
FDD05 - 05D	20~60 VDC	5 WATTS	± 5 VDC	± 500 mA	73%	FA
FDD05 - 12D	20~60 VDC	6 WATTS	± 12 VDC	± 250 mA	75%	FA
FDD05 - 15D	20~60 VDC	6 WATTS	± 15 VDC	± 200 mA	75%	FA
FDD05 - 05D1	9~18 VDC	5 WATTS	± 5 VDC	± 500 mA	67%	FA
FDD05 - 12D1	9~18 VDC	6 WATTS	± 12 VDC	± 250 mA	70%	FA
FDD05 - 15D1	9~18 VDC	6 WATTS	± 15 VDC	± 200 mA	70%	FA
FDD05 - 05D2	18~36 VDC	5 WATTS	± 5 VDC	± 500 mA	73%	FA
FDD05 - 12D2	18~36 VDC	6 WATTS	± 12 VDC	± 250 mA	75%	FA
FDD05 - 15D2	18~36 VDC	6 WATTS	± 15 VDC	± 200 mA	75%	FA
FDD05 - 05D3	36~72 VDC	5 WATTS	± 5 VDC	± 500 mA	73%	FA
FDD05 - 12D3	36~72 VDC	6 WATTS	± 12 VDC	± 250 mA	75%	FA
FDD05 - 15D3	36~72 VDC	6 WATTS	± 15 VDC	± 200 mA	75%	FA
FDD05 - 05D4	9~36 VDC	5 WATTS	± 5 VDC	± 500 mA	73%	FA
FDD05 - 12D4	9~36 VDC	6 WATTS	± 12 VDC	± 250 mA	75%	FA
FDD05 - 15D4	9~36 VDC	6 WATTS	± 15 VDC	± 200 mA	75%	FA
FDD05 - 05D5	18~72 VDC	5 WATTS	± 5 VDC	± 500 mA	73%	FA
FDD05 - 12D5	18~72 VDC	6 WATTS	± 12 VDC	± 250 mA	75%	FA
FDD05 - 15D5	18~72 VDC	6 WATTS	± 15 VDC	± 200 mA	75%	FA



FEATURES

- * LOW COST
- * 4:1 & 3:1 & 2:1 WIDE INPUT RANGE
- * I/O ISOLATION
- * SHORT CIRCUIT PROTECTION
- * HIGH PERFORMANCE

DESCRIPTION

THE FDD05 SERIES ARE 5WATTS & 6W WATTS SINGLE & DUAL OUTPUT DC/DC CONVERTERS. 4:1 & 3:1 & 2:1 WIDE INPUT RANGE WITH I/O ISOLATION AND SHORT CIRCUIT PROTECT FEATURES MAKE IT SUITABLE TO APPLICATION ON VARIABLE APPLICATIONS WITH LOW COST. ALL THE MODELS ARE PACKAGED IN L x W x H = 2" x 2" x 0.47". CONFIGURATION, AND PCB MOUNTABLE DIRECTLY.

SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

- * INPUT VOLTAGE / RANGE: 4:1 & 3:1 & 2:1 SEE MODEL LIST
- * NOMINAL LINE:
 - RANGE 20 ~ 60V.....48VDC
 - RANGE 9 ~ 18V.....12VDC
 - RANGE 18 ~ 36V.....24VDC
 - RANGE 36 ~ 72V.....48VDC
 - RANGE 9 ~ 36V.....24VDC
 - RANGE 18 ~ 72V.....48VDC
- * INPUT FILTER: PI FILTER
- * REVERSE VOLTAGE PROTECTION: INTERNAL SHUNT DIODE; AND EXTERNAL FUSE USED.
- * OUTPUT VOLTAGE ACCURACY: $\pm 2\%$...MAX.
- * LINE REGULATION: $\pm 1\%$...MAX.
- * LOAD REGULATION:
 - (SINGLE OUTPUT MODELS): $\dots\pm 2\%$ (NL ~ FL)
 - (DUAL OUTPUT MODELS): $\dots\pm 5\%$ (20% ~ FL)
- * M.T.B.F.: ACCORDING TO MIL-HDBK-217F, 647,200 Hrs AT @40°C
- * RIPPLE & NOISE (20 Mhz BW, 20% - FL): 100 mVp-p(Typ.); 150mVp-p (MAX.)
- * TEMPERATURE COEFFICIENT : $\pm 0.02\%$ / °C...MAX.
- * SHORT CIRCUIT PROTECTION: CURRENT LIMITED
- * EFFICIENCY: UP TO 75%
- * I/O ISOLATION VOLTAGE: 1,500 VDC...MIN.
- * I/O ISOLATION RESISTANCE: 1G OHM...MIN.
- * STORAGE TEMPERATURE : -40 TO +100°C
- * OPERATING TEMPERATURE : -25 TO +71°C (NO DERATING)
- * COOLING: FREE AIR CONVECTION
- * CASE MATERIAL: BLACK PLASTIC



FDD05 SERIES

DC-DC CONVERTER 5 ~ 6W

MECHANISM & PIN CONFIGURATION

CASE: FA MATERIAL: PLASTIC

PIN ASSIGNMENT					
PIN NO.	1	2	3	4	5
SINGLE	Vi+	Vi-	Vo+	NO PIN	Vo-
DUAL	Vi+	Vi-	Vo+	com	Vo-

ALL DIMENSIONS IN mm [inch]

