

FDD12 SERIES



DC - DC CONVERTER
12W TRIPLE OUTPUT

FEATURES

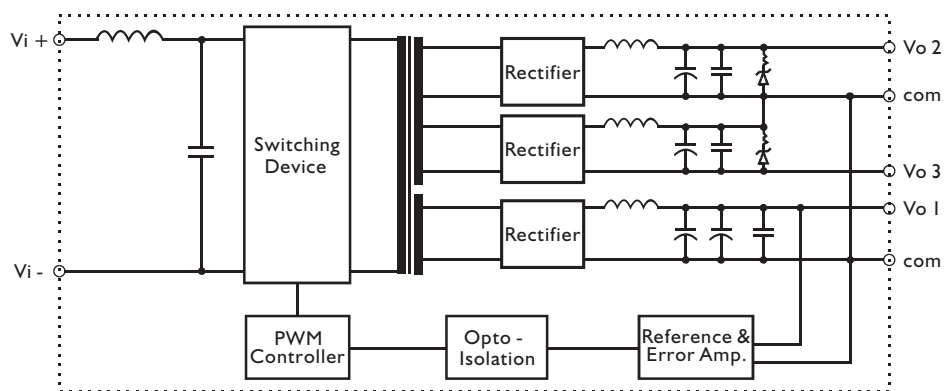
- LOW COST
- 4:1 WIDE INPUT RANGE
- I/O ISOLATION
- LC INPUT FILTER
- SHORT CIRCUIT PROTECTION
- HIGH PERFORMANCE
- 2 YEARS WARRANTY

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (min.)
Single Output Models					
FDD12 - 0512T4	10~36 VDC	12 WATTS	+5 / ± 12 VDC	1.5A / ± 0.2 A	80%
FDD12 - 0515T4	10~36 VDC	12 WATTS	+5 / ± 15 VDC	1.5A / ± 0.16 A	80%
FDD12 - 0512T5	18~72 VDC	12 WATTS	+5 / ± 12 VDC	1.5A / ± 0.2 A	80%
FDD12 - 0515T5	18~72 VDC	12 WATTS	+5 / ± 15 VDC	1.5A / ± 0.16 A	80%

CIRCUIT SCHEMATIC

Block diagram for FDD12 series with triple output



SPECIFICATION

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

GENERAL

Characteristics	Conditions	min.	typ.	max.	unit
Switching frequency	Vi nom, Io nom		200		KHz
Isolation voltage	Input / Output	1,500			VDC
Isolation resistance	Input / Output, @ 500VDC	1G			Ω
Ambient temperature	Operating at Vi nom, Io nom	-25		+ 71	°C
Case temperature	Operating at Vi nom, Io nom			+ 95	°C
Derating	Vi nom	See derating curve			% / °C
Storage temperature	Non operational	-40		+ 100	°C
Dimension	L50.8 x W50.8 x H11.9				mm
Cooling	Free air convection				
Case material	Metal				

INPUT SPECIFICATIONS

Characteristics	Conditions	min.	typ.	max.	unit
Input voltage range	Ta min ... Ta max, Io nom	10	24	36	VDC
		18	48	72	VDC
No load input current	Vi nom, Io = 0	24V models		22	mA
		48V models		15	mA
Input voltage w/o damage	Io nom	24V models		40	VDC
		48V models		75	VDC
Input filter	LC type				

OUTPUT SPECIFICATIONS

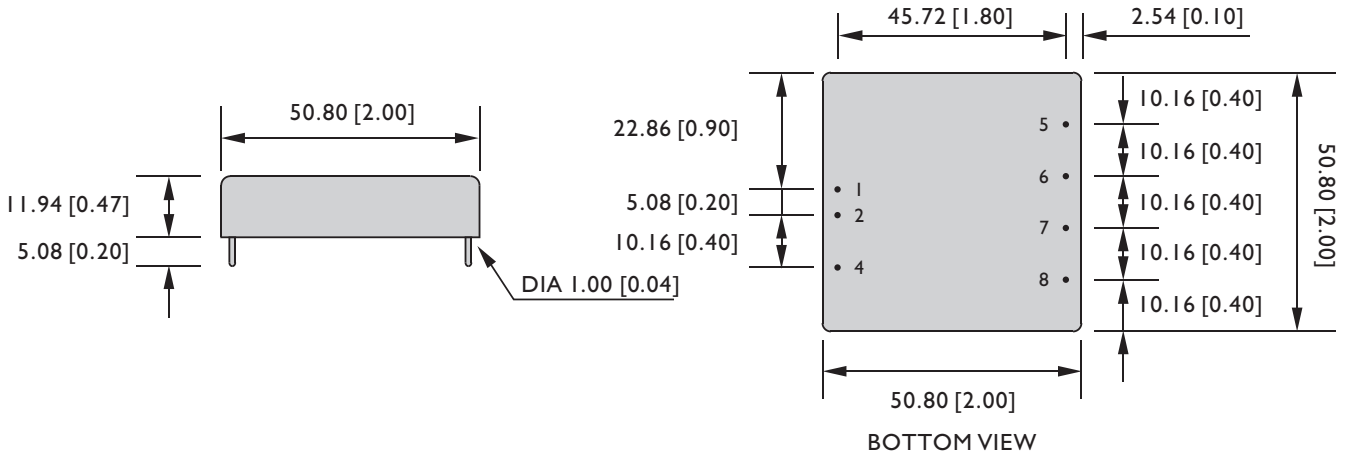
Characteristics	Conditions	min.	typ.	max.	unit
Output voltage accuracy	Vi nom, Io nom	+ 5V		± 2	%
		± 12V or ± 15V		± 6	%
Minimum load	Vi nom	+ 5V	10		%
		± 12V or ± 15V	20		%
Line regulation	Io nom, Vi min ... Vi max			± 2	%
Load regulation	Vi nom, Io min ... Io nom	+ 5V		± 2	%
		± 12V or ± 15V		± 6	%
Transient recovery time	Vi nom, Io nom ... 1/2 Io nom		500		μs
Temperature coefficient	Vi nom, Io nom			± 0.02	% / °C
Ripple & noise	Vi nom, Io nom, BW = 20MHz			Vout x ± 1%	mV
Efficiency	Vi nom, Io nom, Po / Pi	Up to 80%, See model list			

CONTROL AND PROTECTION

Remote ON / OFF	ON: opened or 8 ~ 10VDC applied, reference to input GND
	OFF: -0.3 ~ 2VDC applied, reference to input GND
Input reversed	Shunt diode built in, external fuse recommended
Output short circuit	Continuous

MECHANISM & PIN CONFIGURATION

mm [inch]



PHYSICAL CHARACTERISTICS

CASE SIZE	50.8 x 50.8 x 11.9 mm 2 x 2 x 0.47 inches
CASE MATERIAL	Metal
WEIGHT	70 g

PIN ASSIGNMENT

GENERAL							
PIN NO.	1	2	4	5	6	7	8
TRIPLE	Vi+	Vi-	ON / OFF	Vo2 (+ OUT)	Vo1 (+ 5V)	com	Vo3 (- OUT)

DERATING

