

TDD05 SERIES

DC-DC CONVERTER 5 ~ 6W



TDD05 - 03 S 4

WATTAGE

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

4: 10~36V IN
5: 18~72V IN

S : SINGLE OUTPUT
D : DUAL OUTPUT

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (MIN.)	CASE
Single Output Models						
TDD05 - 03S4	10~36 VDC	5 WATTS	+3.3 VDC	1500 mA	63%	TA
TDD05 - 05S4	10~36 VDC	5 WATTS	+ 5 VDC	1000 mA	68%	TA
TDD05 - 12S4	10~36 VDC	6 WATTS	+ 12 VDC	500 mA	73%	TA
TDD05 - 15S4	10~36 VDC	6 WATTS	+ 15 VDC	400 mA	73%	TA
TDD05 - 03S5	18~72 VDC	5 WATTS	+3.3 VDC	1500 mA	63%	TA
TDD05 - 05S5	18~72 VDC	5 WATTS	+ 5 VDC	1000 mA	70%	TA
TDD05 - 12S5	18~72 VDC	6 WATTS	+ 12 VDC	500 mA	75%	TA
TDD05 - 15S5	18~72 VDC	6 WATTS	+ 15 VDC	400 mA	76%	TA
Dual Output Models						
TDD05 - 05D4	10~36 VDC	5 WATTS	± 5 VDC	± 500 mA	68%	TA
TDD05 - 12D4	10~36 VDC	6 WATTS	± 12 VDC	± 250 mA	72%	TA
TDD05 - 15D4	10~36 VDC	6 WATTS	± 15 VDC	± 200 mA	73%	TA
TDD05 - 05D5	18~72 VDC	5 WATTS	± 5 VDC	± 500 mA	70%	TA
TDD05 - 12D5	18~72 VDC	6 WATTS	± 12 VDC	± 250 mA	75%	TA
TDD05 - 15D5	18~72 VDC	6 WATTS	± 15 VDC	± 200 mA	76%	TA

FEATURES

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

DESCRIPTION

THE TDD05 SERIES ARE 5 ~ 6WATTS SINGLE & DUAL OUTPUT DC/DC CONVERTER. 4:1 WIDE INPUT RANGE, I/O ISOLATION, GOOD EFFICIENCY WITH EXCELLENT LINE/LOAD REGULATION WITH SHORT CIRCUIT PROTECT FEATURES. IT MAKES TDD05 SUITABLE TO POWER COMMERCIAL & INDUSTRIAL TYPE OF ELECTRONIC CIRCUITS AT VERY LOW COST. ALL TDD05 MODELS ARE PACKAGED IN 2 x 1 x 0.47" BLACK COATED COPPER CASE WITH NON-CONDUCTIVE PLASTIC BASE PLATE. CONFIGURATION, AND PCB MOUNTABLE DIRECTLY.



SPECIFICATION

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

GENERAL SPECIFICATION

- * Switching frequency: 200KHz
- * Isolation voltage: 1,500VDC
- * Isolation resistance: 1G Ω (min.)
- * Operating ambient temperature: -25 to +71°C
- * Storage temperature: -40 to +100°C
- * Max. Case temperature: 95°C
- * Cooling: Free air convection
- * Temperature coefficient: $\pm 0.02\%$ / °C
- * Dimension: 50.8 x 25.4 x 12mm

INPUT SPECIFICATIONS

- * Input voltage range / frequency: 10 ~ 36VDC for 24V
18 ~ 72VDC for 48V
- * Input filter: Pi type
- * No load input current: 25mA for 24V in
12mA for 48V in
- * Max. Input voltage: 40VDC for 24V in
- * Startup voltage: 75VDC for 48V in

OUTPUT SPECIFICATIONS

- * Output voltage accuracy: $\pm 2\%$ at V_{o_nom}
- * Minimum load: No load for single output models
 $\pm 20\%$ at V_{o_nom} for dual output models
- * Line regulation: $\pm 1\%$ at V_{o_nom}
- * Load regulation: $\pm 2\%$ at V_{o_nom} for single output models
 $\pm 5\%$ at V_{o_nom} for dual output models
- * Ripple & noise: 150mV (max.)
- * Efficiency: Up to 76%, see model list
- * Derating: See table 1
- * Case material: Metal

CONTROL AND PROTECTION

- * Input reversed: Shunt diode use external fuse
- * Output short circuit: Continuous

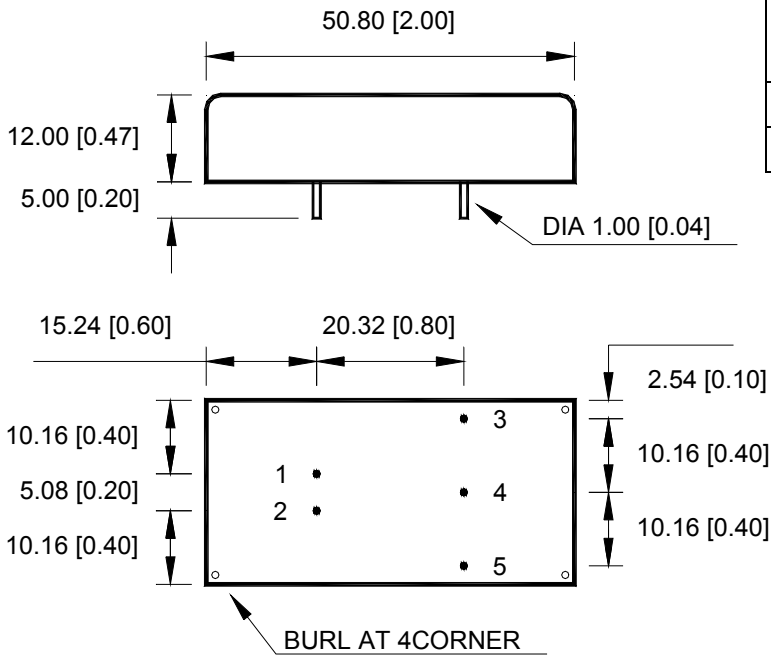


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MECHANISM & PIN CONFIGURATION

mm [inch]



PHYSICAL CHARACTERISTICS

CASE SIZE	50.8 X 25.4 x 12mm 2 x 1 x 0.47inches
CASE MATERIAL	Metal
WEIGHT	35 g

PIN ASSIGMENT

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

Derating:

[TABLE 1]

