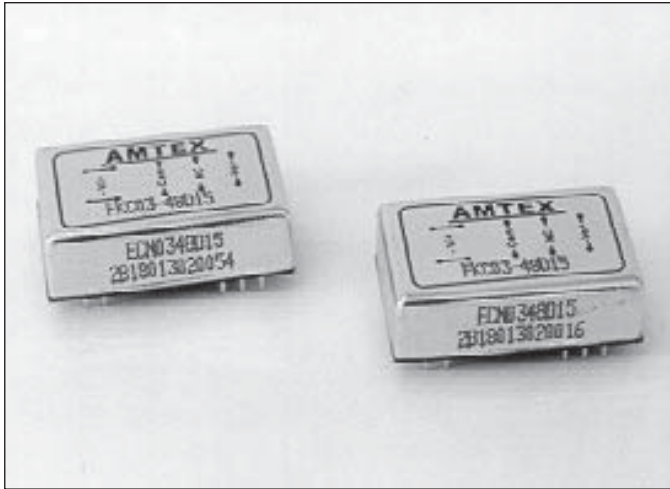


FKC05 SERIES

DC/DC Single & Dual Converters: 5 Watts



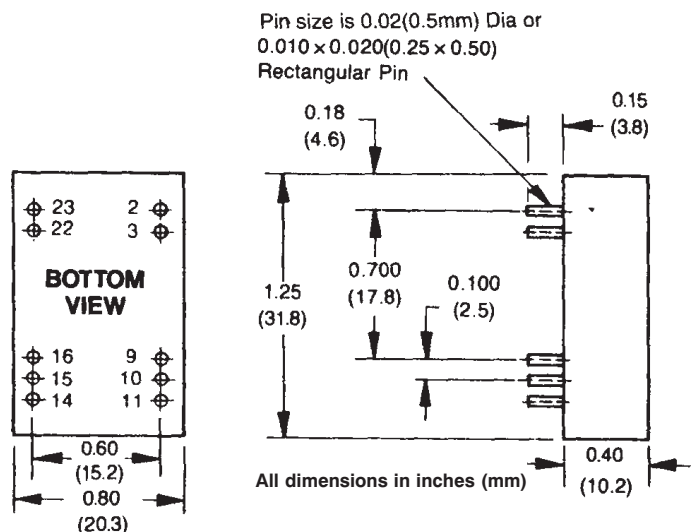
Features

- Wide input 2:1 range and 4:1 option - **W**
- Standard 24 PIN or SMD type option - **SMD**
- Nickel-coated copper shield
- EMC: EN55022. Immunity: EN61000-4
- Isolation: 1600V
- Low ripple and noise
- Safety approvals to EN60950, UL1950
- High operating temperature 85°C
- Wide operating temperature option -40°C to +85°C
- High MTBF 3,165,000 hours
- Over current protection
- For wide input option add **-W** to model

Specifications

INPUT VOLTAGE:	12VDC (9 - 18) 24VDC (18 - 36) FKC05-W (9-36) 48VDC (36 - 75), FKC05-W (18-75)
INPUT FILTER:	Pi type
INPUT SURGE VOLTAGE: (100ms max.)	12V/36V, 24V/50V, 48V/100V
EFFICIENCY:	Model dependent 76~84%
START UP TIME:	600ms typical with constant resistor load
VOLTAGE ACCURACY:	±2%
VOLTAGE ADJUSTMENT:	N/A
MINIMUM LOAD:	0%. (FKC05-W requires 10%)
LINE REGULATION:	±0.02% at constant 100% load
LOAD REGULATION:	±0.5% Single, ±1% Dual, 25%~100% load
RIPPLE & NOISE:	50mV p-p 20MHz bandwidth
OVERLOAD PROTECTION:	Continuous, auto recovery. Hiccup mode
TRANSIENT RESPONSE:	Recovery time 200µS 25% load step
ISOLATION VOLTAGE:	1600 VDC
SWITCHING FREQUENCY:	300KHz typical
SAFETY STANDARD:	IEC950, UL1950, EN60950
CASE MATERIAL:	Nickel-coated copper shield
OPERATING TEMP:	-25°C to +70°C non derating -40°C to +85°C non derating -M1 option -40°C to +85°C with derating -M2 option
HUMIDITY:	5% to 95% RH
COOLING:	Free air convection
SHOCK & VIBRATION:	MIL-STD-810D
EMC:	Meets EN55022A
IMMUNITY:	EN61000-4-2, -3, -4, -5, -6
CAPACITOR LOADING:	Model dependent, consult office
DIMENSIONS & WEIGHT:	31.8 x 20.3 x 10.2mm 18g

Model	Input V	Output V A	Power W
FKC05 - 12S33	12V	3.3V 1000mA	5.0W
FKC05 - 12S05	12V	5V 1000mA	5.0W
FKC05 - 12S12	12V	12V 470mA	5.0W
FKC05 - 12S15	12V	15V 400mA	5.0W
FKC05 - 12D05	12V	±5V 500mA	5.0W
FKC05 - 12D12	12V	±12V 230mA	5.0W
FKC05 - 12D15	12V	±15V 190mA	5.0W
FKC05 - 24S33	24V	3.3V 1000mA	5.0W
FKC05 - 24S05	24V	5V 1000mA	5.0W
FKC05 - 24S12	24V	12V 470mA	5.0W
FKC05 - 24S15	24V	15V 400mA	5.0W
FKC05 - 24D05	24V	±5V 500mA	5.0W
FKC05 - 24D12	24V	±12V 230mA	5.0W
FKC05 - 24D15	24V	±15V 190mA	5.0W
FKC05 - 48S33	48V	3.3V 1000mA	5.0W
FKC05 - 48S05	48V	5V 1000mA	5.0W
FKC05 - 48S12	48V	12V 470mA	5.0W
FKC05 - 48S15	48V	15V 400mA	5.0W
FKC05 - 48D05	48V	±5V 500mA	5.0W
FKC05 - 48D12	48V	±12V 230mA	5.0W
FKC05 - 48D15	48V	±15V 190mA	5.0W



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Pin#	Single	Dual	Pin#	Single	Dual
2	-Vin	-Vin	14	+Vout	+Vout
3	-Vin	-Vin	15	NC	NC
9	NC	Common	16	-Vout	Common
10	NC	NC	22	+Vin	+Vin
11	NC	- Vout	23	+Vin	+Vin

FDC05 SERIES

DC/DC Single & Dual Converters: 5 Watts



Features

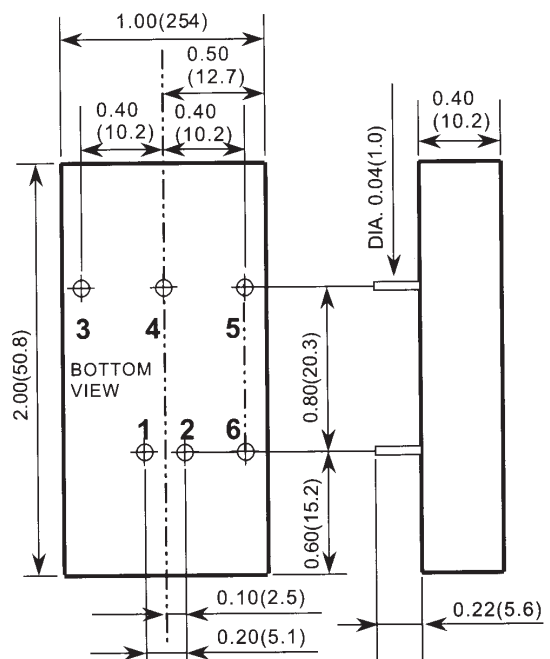
- Wide input 2:1 range standard model
- 4:1 input option **FDC05-W**
- Single and Dual output options
- Nickel coated copper shield
- EMC EN55022. Immunity EN61000-4
- Isolation 1600 V
- Low ripple and noise
- Safety approvals to EN60950, UL1950
- High operating temperature 70°C with no derating
- -40°C to +85°C non derating - **M1 option**
- -40°C to +85°C with derating - **M2 option**
- High MTBF 3,145,000 hours
- Overcurrent protection

Specifications

INPUT VOLTAGE:	12VDC (9 - 18) 24VDC (18 - 36) 48VDC (36 - 75)	FDC05-W (9~36) FDC05-W (18~75)
INPUT FILTER:	Pi type	
INPUT SURGE VOLTAGE:	12V/36V, 24V/50V, 48V/100V (100ms max)	
EFFICIENCY:	Model dependent 73~82%	
START UP TIME:	600ms typical with constant resistor load	
VOLTAGE ACCURACY:	±2%	
VOLTAGE ADJUSTMENT:	N/A	
MINIMUM LOAD:	0%. (FDC05 W requires 10%)	
LINE REGULATION:	±0.2% at constant 100% load	
LOAD REGULATION:	±0.2% Single. ±1% Dual, 25%~100% load	
RIPPLE & NOISE:	50mV p-p 20MHz bandwidth	
OVERLOAD PROTECT:	Continuous, auto recovery. Hiccup mode	
TRANSIENT RESPONSE:	Recovery time 200µS 25% load stop	
ISOLATION VOLTAGE:	1600 VDC	
SWITCHING FREQUENCY:	300KHz typical (200KHz FDC05-W)	
SAFETY STANDARD:	IEC950, UL1950, EN60950	
CASE MATERIAL:	Nickel coated copper shield	
OPERATING TEMP:	-25°C to +70°C non derating -40°C to +85°C non derating - M1 option -40°C to +85°C with derating - M2 option	
HUMIDITY:	5% to 95% RH	
COOLING:	Free air convection	
SHOCK & VIBRATION:	MIL-STF-810D	
EMC:	Meets EN55022 A	
IMMUNITY:	EN61000-4-2, -3, -4, -5, -6	
CAPACITOR LOADING:	Model dependent, consult office	
DIMENSIONS & WEIGHT:	50.8 x 25.4 x 10.2mm 27g	
REMOTE ON/OFF:	Option: Consult office for details -P Positive Logic Control -N Negative Logic Control	

Model	Input V	Output V A	Power W
FDC05 - 12S33	12V	3.3V 1000mA	5.0W
FDC05 - 12S05	12V	5V 1000mA	5.0W
FDC05 - 12S12	12V	12V 470mA	5.0W
FDC05 - 12S15	12V	15V 400mA	5.0W
FDC05 - 12D05	12V	±5V 500mA	5.0W
FDC05 - 12D12	12V	±12V 230mA	5.0W
FDC05 - 12D15	12V	±15V 190mA	5.0W
FDC05 - 24S33	24V	3.3V 1000mA	5.0W
FDC05 - 24S05	24V	5V 1000mA	5.0W
FDC05 - 24S12	24V	12V 470mA	5.0W
FDC05 - 24S15	24V	15V 400mA	5.0W
FDC05 - 12D05	24V	±5V 500mA	5.0W
FDC05 - 24D12	24V	±12V 230mA	5.0W
FDC05 - 24D15	24V	±15V 190mA	5.0W
FDC05 - 48S33	48V	3.3V 1000mA	5.0W
FDC05 - 48S05	48V	5V 1000mA	5.0W
FDC05 - 48S12	48V	12V 470mA	5.0W
FDC05 - 48S15	48V	15V 400mA	5.0W
FDC05 - 48D05	48V	±5V 500mA	5.0W
FDC05 - 48D12	48V	±12V 230mA	5.0W
FDC05 - 48D15	48V	±15V 190mA	5.0W

Pin#	Single	Dual	Pin#	Single	Dual
1	+Vin	+Vin	4	No pin	Common
2	-Vin	-Vin	5	-Vout	-Vout
3	+Vout	+Vout	6	CTRL - option	CTRL - option



1. All dimensions in inches (mm) 2. Pin pitch tolerance ±0.014 (0.35)