

FKCO8W SERIES

DC / DC Single & Dual Output: 8 Watts



Features

- 4:1 wide Input range
- 9~36V & 18~75V input voltage options
- Single & Dual outputs
- Fixed switching frequency 300KHz
- Standard 24 pin DIP package
- **SMD** option
- High efficiency up to 85%
- Regulated output & Short circuit protection
- 1600V isolation
- Five sided continuous copper shield

Specifications:

Input Voltage	24VDC (9 ~ 36) 48VDC (18 ~ 75)	Efficiency	Model dependant 83 ~ 87%
Input Filter	Pi type	Isolation	1600VDC
Input Surge Voltage. (100mS)	24V: 50VDC. 48V: 100VDC	Isolation Cap.	1500pF
Input Reflected Ripple Current	20mA pk-pk (@ nominal input & 100% load	Switching Freq.	300KHz
Start Up time	450mS constant resistive load	Safety	EN60950-1, UL60950-1
Remote ON/OFF (Positive logic)	DC-DC ON Open or 3.5V < Vr < 12V DC-DC OFF Short or 0V < Vr < 1.2V Input current of remote control pin: 0.5mA Remote off state input current: 2.5mA	Case Material	Nickel-coated copper
Output power	8 watts	Base Material	Non-conductive black plastic
Voltage Accuracy	±1%	Potting	Epoxy UL94-V0
Minim Load	Zero	Dimensions	31.8 x 20.3 x 10.2mm
Line Regulation	±0.2%	Weight	18g
Load Regulation	Single ±0.5% , Dual ±1% (0% -100% load)	MTBF	1.078 x 10 ⁶ Hrs
Cross Regulation	±5% Asymmetrical load: 25-100% load)	Operating Temp	-40°C to +74°C (with derating)
Ripple & noise	See table. 20MHZ bandwidth	Case Temp	+100°C maximum case temperature
Temp. Coefficient	±0.02% / °C	Thermal Impedance	20°C / watt
Transient Response	200uS (25% load step change)	Thermal shock	MIL-STD-810F
Over Voltage Protection (Single Only)	3.3V: 3.9V 5V: 6.2V 12V: 15V 15V: 18V	Vibration	10-55Hz, 10G, 30min along X, Y, Z
Overload Protection	Typically 150% of load	Humidity	5-95% RH
Short Circuit protection	Continuous hiccup mode	EMC	EN55022 Class A Consult office for Class B design
		ESD	EN61000-4-2
		Radiated Immunity	EN61000-4-3
		Fast Transients	EN61000-4-4
		Surge	EN61000-4-5
		Conducted Immunity	EN61000-4-6

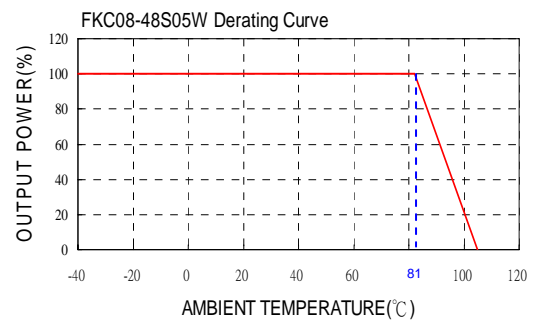
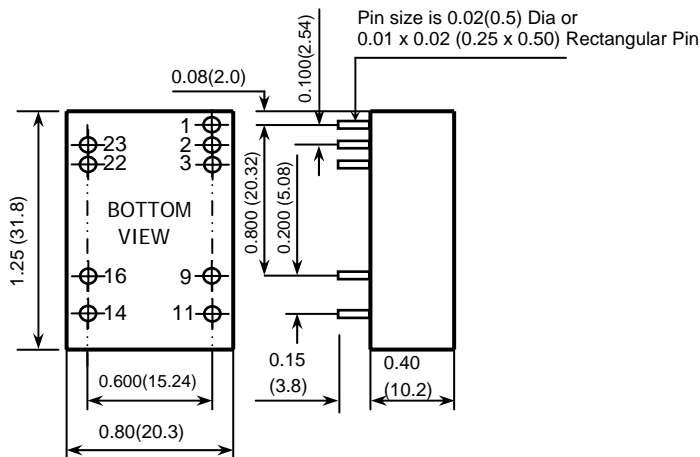
FKC08W SERIES

DC / DC Single & Dual Output: 8 Watts

Model	Input V	Output		Ripple & Noise	Input Current		Eff (%)	Capacitor Load max	Power W
		V	A		No load	Full Load			
FKC08-24S3P3W	9 – 36 V	3.3 V	2400mA	50mVp-p	40mA	407mA	85	1330uF	7.9W
FKC08-24S05W	9 – 36 V	5 V	1600mA	50mVp-p	40mA	402mA	87	1330uF	8W
FKC08-24S12W	9 – 36 V	12 V	666mA	50mVp-p	25mA	407mA	86	288uF	8W
FKC08-24S15W	9 – 36 V	15 V	533mA	50mVp-p	25mA	407mA	86	200uF	8W
FKC08-24D05W	9 – 36 V	± 5 V	± 800mA	50mVp-p	20mA	417mA	84	± 900uF	8W
FKC08-24D12W	9 – 36 V	± 12 V	± 333mA	50mVp-p	25mA	407mA	86	± 133uF	8W
FKC08-24D15W	9 – 36 V	± 15 V	± 267mA	50mVp-p	25mA	407mA	86	± 90uF	8W
FKC08-48S3P3W	18 – 75 V	3.3 V	2400mA	50mVp-p	20mA	204mA	85	1330uF	7.9W
FKC08-48S05W	18 – 75 V	5 V	1600mA	50mVp-p	20mA	201mA	87	1330uF	8W
FKC08-48S12W	18 – 75 V	12 V	666mA	50mVp-p	13mA	201mA	87	288uF	8W
FKC08-48S15W	18 – 75 V	15 V	533mA	50mVp-p	13mA	198mA	88	200uF	8W
FKC08-48D05W	18 – 75 V	± 5 V	± 800mA	50mVp-p	10mA	208mA	84	± 900uF	8W
FKC08-48D12W	18 – 75 V	± 12 V	± 333mA	50mVp-p	13mA	201mA	87	± 133uF	8W
FKC08-48D15W	18 – 75 V	± 15 V	± 267mA	50mVp-p	13mA	201mA	87	± 90uF	8W

Note:

1. Values specified at nominal input voltage and full load
2. The ON/OFF control pin voltage is referenced to -Vin.
3. The FKC08W series can meet EN55022 Class A with parallel an external capacitor to the input pins.
Recommend : 24Vin : 1μF/50V 1210 MLCC .48Vin : 0.47μF/100V 1812 MLCC.
4. An external filter capacitor is required if the module has to meet EN61000-4-5.
The filter capacitor suggest: Nippon chemi-con KY series, 220μF/100V, ESR 48mΩ.



Pin Assignmnet					
Pin	Single	Dual	Pin	Single	Dual
1	Ctrl	Ctrl			
2	- Input	- Input	23	+Input	+Input
3	- Input	- Input	22	+Input	+Input
9	NC	COM	16	- Output	COM
11	NC	- Output	14	+Output	+Output