Make-Ps®
DC/DC CONVERTER

Single & Dual Output DC/DC Converter

Series FKC08

8Watt | DC-DC Converter

RoHS

FEATURES:

- 2:1Wide Input Voltage.
- 8 Watt 24PIN DIL Package.
- Efficiency To 82%
- PI Input Filter.
- 1600Vdc Isolation
- MTBF:>1,500,000 hrs
- Operating Temperature:-40℃ TO +100℃

APPLICATIONS:

- Wireless Network
- Telecom/Datacom
- Industry Control System
- Measurement Equipment
- Semiconductor Equipment

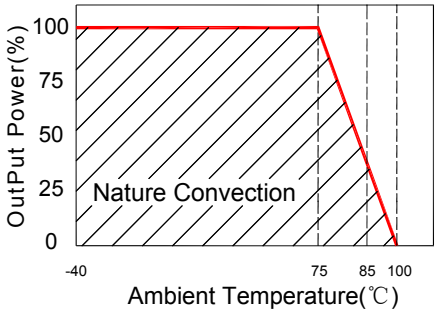
Model Selection Chart

Part Number	Input Voltage Vdc	Input Current No-Load (mA TYP)	Input Current Full Load (mA TYP)	Output Voltage Vdc	Output Current Full Load (mA)	Efficiency %TYP
FKC08-05S12	4.5-9	25	1927	12	666	83
FKC08-05S15	4.5-9	25	1927	15	533	83
FKC08-05D12	4.5-9	25	1927	±12	±333	83
FKC08-05D15	4.5-9	25	1927	±15	±266	83
FKC08-12S03	9-18	20	784	3.3	2424	85
FKC08-12S05	9-18	20	784	5	1600	85
FKC08-12S12	9-18	20	784	12	666	85
FKC08-12S15	9-18	20	784	15	533	85
FKC08-12D05	9-18	20	784	±5	±800	85
FKC08-12D12	9-18	20	784	±12	±333	85
FKC08-12D15	9-18	20	784	±15	±267	85
FKC08-24S03	18-36	20	392	3.3	2424	85
FKC08-24S05	18-36	20	392	5	1600	85
FKC08-24S12	18-36	20	392	12	666	85
FKC08-24S15	18-36	20	392	15	533	85
FKC08-24D05	18-36	20	392	±5	±800	85
FKC08-24D12	18-36	20	392	±12	±333	85
FKC08-24D15	18-36	20	392	±15	±267	85
FKC08-48S03	36-72	20	196	3.3	2424	85
FKC08-48S05	36-72	20	196	5	1600	85
FKC08-48S12	36-72	20	196	12	666	85
FKC08-48S15	36-72	20	196	15	533	85
FKC08-48D05	36-72	20	196	±5	±800	85
FKC08-48D12	36-72	20	196	±12	±333	85

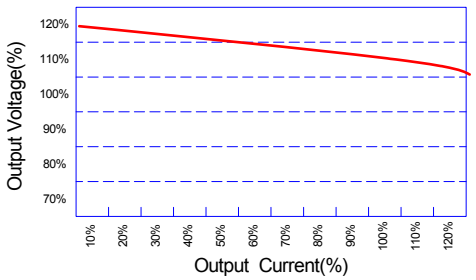
FKC08-05S12/*** add Suffix SMD for SMD package

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Temperature Derating Graph



Tolerance Envelope Graph



Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				2:1	
Filter	Pi TYPE				

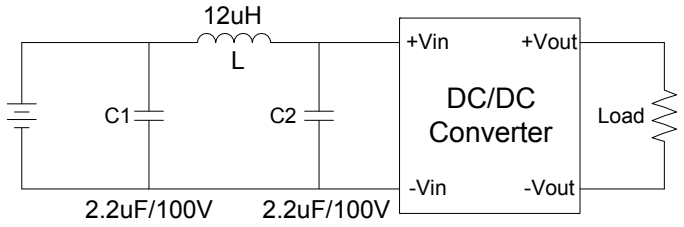
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous				
Line Regulation				±0.5	%
Load Regulation	Single (F.L To 10% Load)			±0.5	%
Load Regulation	Dual (F.L To 1/4 Load)			±1.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us

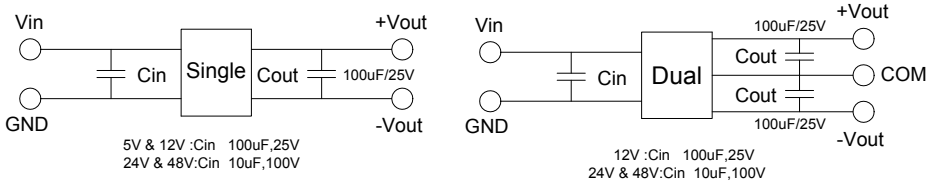
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature		-40		100	℃
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated With Non-Conductive Base				
Weight			16.2		g
Dimensions		31.6x20.1x10.0			mm
Potting Material		Epoxy (UL94V-0 rated)			
Radiated Emissions	EN55022	CLASS A			
Radiated Emissions	FCC 47 CFR Part 15 subpart A	CLASS A			

Suggest adding input external filter(C1,C2,L)to meet conducted emissions (En55022 class A)

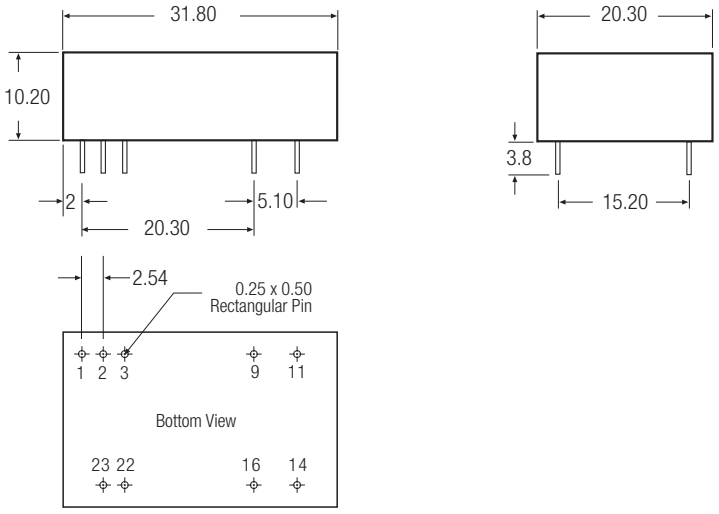


Recommended Test Circuit



Outline Drawing

Package Style and Pinning (mm)



DIP24 Package Style

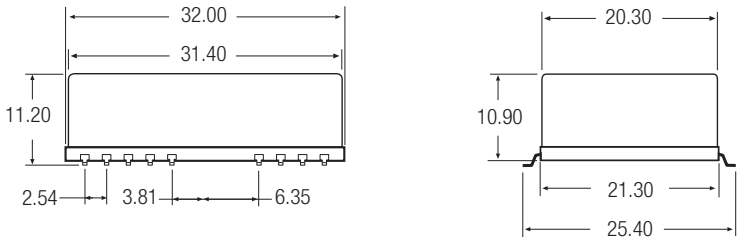
Pin Connections

Pin #	Single	Dual
1	ON/OFF	ON/OFF
2	-Vin	-Vin
3	-Vin	-Vin
9	NC	Com
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Com
22	+Vin	+Vin
23	+Vin	+Vin

NC = No Connection

Pin Pitch Tolerance ±0.35 mm

SMD Package Style



SMD Package Style

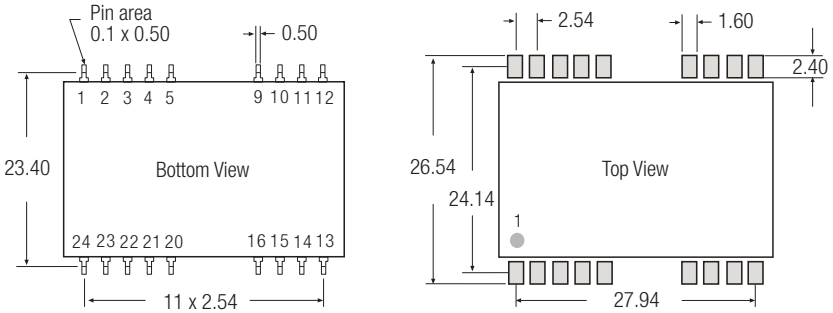
Same spec. as the original DIP spec. and pin definition, excl. of the SMD type pin.

Pin Connections

Pin #	Single	Dual
1	ON/OFF	ON/OFF
2	-Vin	-Vin
3	-Vin	-Vin
9	NC	Com
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Com
22	+Vin	+Vin
23	+Vin	+Vin
Others	NC	NC

NC = No Connection

Pin Pitch Tolerance ±0.35 mm



All specifications are typical at nominal input, nominal load and 25° C unless otherwise specified.
External, low ESR, 10 microfarad (minimum) capacitor across output is recommended for operation.

Make Power world-class design, development and manufacturing team stands ready to work with you to deliver the exact power converter you need for your ready to work with you to deliver the exact power converter you need for your demanding, large volume, OEM applications. And ... we ll do it on time and within budget

Our experienced applications and design staffs; quick-turn prototype capability; highly automated, SMT assembly facilities; and in-line SPC quality-control techniques combine to give us the unique ability to design and deliver any quantity of power converters to the highest standards of quality and reliability.

We have compiled a large library of DC/DC designs that are currently used in a variety of telecom, medical, computer, railway, aerospace and industrial applications. We may already have the converter you need.

Contact us. Our goal is to provide you the highest-quality, most cost-effective power converters available.

CUSTOM CAPABILITIES