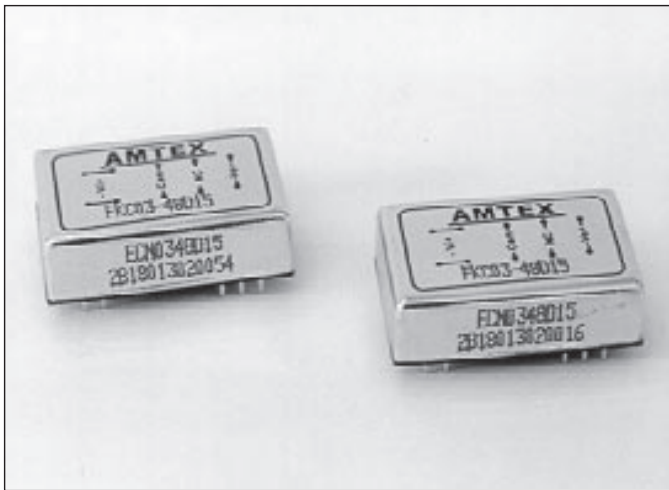


## KC SERIES

### DC/DC Single & Dual Converters: 3 Watts



#### Features

- Fully regulated outputs
- Four different D.I.L. packages
- Pi input filter
- 2:1 and 4:1 input voltage range options
- Low ripple and noise 50mV p-p
- Nickel coated copper shielding
- 1600 VDC isolation
- Low profile 10.2mm
- High operating temperature +70°C
- Surface mount option (SMD)

#### SPECIFICATIONS

<b>INPUT VOLTAGE:</b> (FKC, MKC, YKC)	12VDC (9 - 18) 24VDC (18 - 36) 48VDC (36 - 75)
<b>INPUT VOLTAGE:</b> (VKC)	12/24VDC (9 - 36) 24/48VDC (18 - 75)
<b>INPUT FILTER:</b>	Pi type
<b>EFFICIENCY:</b>	Model dependent 74 - 79%
<b>VOLTAGE ACCURACY:</b>	2%
<b>RIPPLE &amp; NOISE:</b>	50mV p-p (20MHz BW)
<b>LINE REGULATION:</b>	±0.2% singles & dual
<b>LOAD REGULATION:</b>	±0.2% singles, ±2% dual
<b>TEMPERATURE CO-EFFICIENT:</b>	±0.02% / °C
<b>OVERCURRENT PROTECTION:</b>	Continuous foldback
<b>SWITCHING FREQUENCY:</b>	300KHz
<b>ISOLATION:</b>	In - Out 500 VDC (MKC), 1600 VDC (VKC, FKC, YKC)
<b>ISOLATION RESISTANCE:</b>	10 9 Ohms
<b>ISOLATION CAPITANCE:</b>	300 pF maximum
<b>OPERATING TEMPERATURE:</b>	-25°C to +70°C non derating -40° C to +85°C M1 option
<b>STORAGE TEMPERATURE:</b>	-55°C to +105°C
<b>COOLING:</b>	Free air convection
<b>EMI/RFI:</b>	Five-sided shield
<b>CASE MATERIAL:</b>	Nickel coated copper with non-conductive base
<b>DIMENSIONS:</b>	31.8 x 20.3 x 10 2mm
<b>REMOTE CONTROL:</b> (VKC only)	Control voltage referenced to -VE input Compatibility: Cmos, TTL On-control: 4.8V min. or Open Off-control: 0.4V max. or Short

#### MODEL SELECTION

- Refer to mechanical packages and pin-out diagrams
- Select the required pin-out package
- Replace the "xx" on model with required suffix

eg: FKC03 - 24S12, MKC03 - 48D12

Model	Input V	Output V	Output A	Power W
xx C03 - 12S33	12V	3.3V	500mA	3.0W
xx C03 - 12S05	12V	5V	500mA	3.0W
xx C03 - 12S12	12V	12V	250mA	3.0W
xx C03 - 12S15	12V	15V	200mA	3.0W
xx C03 - 12D05	12V	±5V	250mA	3.0W
xx C03 - 12D12	12V	±12V	125mA	3.0W
xx C03 - 12D15	12V	±15V	100mA	3.0W
xx C03 - 24S33	24V	3.3V	500mA	3.0W
xx C03 - 24S05	24V	5V	500mA	3.0W
xx C03 - 24S12	24V	12V	250mA	3.0W
xx C03 - 24S15	24V	15V	200mA	3.0W
xx C03 - 24D05	24V	±5V	250mA	3.0W
xx C03 - 24D12	24V	±12V	125mA	3.0W
xx C03 - 24D15	24V	±15V	100mA	3.0W
xx C03 - 48S33	48V	3.3V	500mA	3.0W
xx C03 - 48S05	48V	5V	500mA	3.0W
xx C03 - 48S12	48V	12V	250mA	3.0W
xx C03 - 48S15	48V	15V	200mA	3.0W
xx C03 - 48D05	48V	±5V	250mA	3.0W
xx C03 - 48D12	48V	±12V	125mA	3.0W
xx C03 - 48D15	48V	±15V	100mA	3.0W

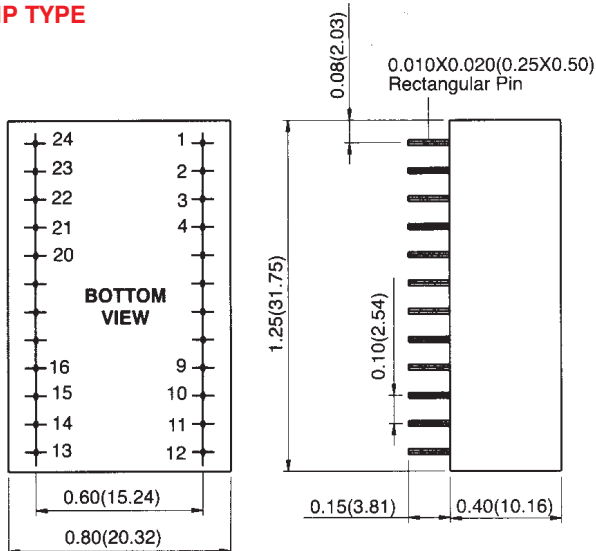
# KC SERIES

## DC/DC Single & Dual Converters: 3 Watts

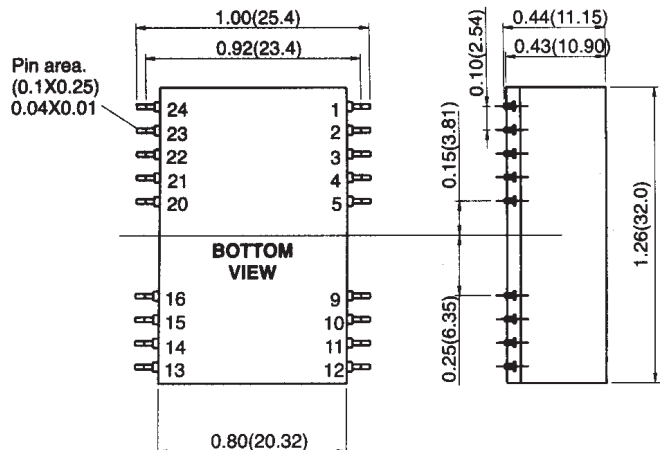
Pin Connections DIP Type									
Series	FKC03		MKC03			VKC03		YKC03	
Pin#	Single	Dual	Single	Dual	DS	Single	Dual	Single	Dual
1	No Pin	No Pin	+V in	+V in	+V in	+V in	+V in	+V in	+V in
2	- V in	- V in	NC	- V out	- V1 out	+V in	+ V in	+V in	+ V in
3	- V in	- V in	NC	Common	+ V1 out	No Pin	No Pin	No Pin	No Pin
4, 5, 6, 7, 8	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin
9	NC	Common	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin
10	NC	NC	- V out	Common	-V2 out	NC	Common	NC	Common
11	NC	- V out	+V out	+V out	+V2 out	NC	Common	NC	Common
12	No Pin	No Pin	- V in	- V in	- Vin	- V out	NC	- V out	NC
13	No Pin	No Pin	- V in	- V in	- Vin	+V out	- V out	+V out	- V out
14	+V out	+V out	+V out	+V out	+V2 out	No Pin	No Pin	No Pin	No Pin
15	NC	NC	- V out	Common	-V2 out	NC	+V out	NC	+V out
16	- V out	Common	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin
17, 18, 19	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin
20	No Pin	No Pin	No Pin	No Pin	No Pin	Control	Control	No Pin	No Pin
21	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin	No Pin
22	+V in	+V in	NC	Common	+V1 out	No Pin	No Pin	No Pin	No Pin
23	+V in	+V in	NC	- V out	- V1 out	- V in	- V in	- V in	- V in
24	No Pin	No Pin	+V in	+V in	+V in	- V in	- V in	- V in	- V in

Pin Connections SMD Type									
Series	FKC03		MKC03			VKC03		YKC03	
Pin#	Single	Dual	Single	Dual	DS	Single	Dual	Single	Dual
1	NC	NC	+V in	+V in	+V in	+V in	+V in	+V in	+V in
2	- V in	- V in	NC	- V out	- V1 out	+V in	+ V in	+V in	+ V in
3	- V in	- V in	NC	Common	+ V1 out	NC	NC	NC	NC
4, 5	NC	NC	NC	NC	NC	NC	NC	NC	NC
9	NC	Common	NC	NC	NC	NC	NC	NC	NC
10	NC	NC	- V out	Common	- V2 out	NC	Common	NC	Common
11	NC	- V out	+V out	+V out	+V2 out	NC	Common	NC	Common
12	NC	NC	- V in	- V in	- Vin	- V out	NC	- V out	NC
13	NC	NC	- V in	- V in	- Vin	+V out	- V out	+V out	- V out
14	+V out	+V out	+V out	+V out	+V2 out	NC	NC	NC	NC
15	NC	NC	- V out	Common	- V2 out	NC	+V out	NC	+V out
16	- V out	Common	NC	NC	NC	NC	NC	NC	NC
20, 21	NC	NC	NC	NC	NC	Control	Control	NC	NC
22	+V in	+V in	NC	Common	+V1 out	NC	NC	NC	NC
23	+V in	+V in	NC	- V out	- V1 out	- V in	- V in	- V in	- V in
24	NC	NC	+V in	+V in	+V in	- V in	- V in	- V in	- V in

### DIP TYPE



### SMD TYPE



All dimensions in inches (mm) Pin Pitch tolerance  $\pm 0.014$  (0.35)