



# 25 WATT SINGLE/DUAL/TRIPLE OUTPUT REGULATED 2:1 INPUT RANGE DC/DC Converters



## FEATURES

- Input/Output Isolation
- Efficiency to 86% @FL
- 100KHz Min. Switching Frequency
- Short Circuit Protection
- 6-Sided Shielding Available
- Epoxy Encapsulated

KW25 Series

## Specifications

All specifications are typical at nominal input, full load, and 25°C , unless otherwise noted.

### INPUT

Input Voltages.....	Voltage Range
12 Vdc.....	9-18 Vdc
24 Vdc.....	18-36 Vdc
48 Vdc.....	36-72 Vdc

### OUTPUT

Voltage Accuracy.....	±1.0%
Line Regulation .....	±0.1%
Load Regulation.....	±0.5%
Ripple Noise (20 MHz BW).....	50mV p-p max.
Temperature Coefficient (at FL).....	±0.02%/°C
Transient Response, 25% load step.....	<250µs

### GENERAL

Efficiency.....	86% max.@FL
Isolation Voltage.....	500 Vdc min.
.....	Up to 3000 Vdc min. Optional
Isolation Resistance.....	1000M Ohms
Switching Frequency.....	100KHz typ.
Protection.....	Over Current Protection
.....	Short Circuit Protection

### ENVIRONMENTAL

Operating Temperature Range.....	-25 to +71°C
Storage Temperature Range.....	-50 to +105°C
Cooling .....	Free Air Convection
EMI/RFI.....	Five-Sided Shield
.....	Six-Sided Shield (Optional)

### PHYSICAL

Case Material.....	Black Coated Copper
.....	with Non-Conductive Metal Base
Dimensions.....	.285" x 2.66" x 0.87"
.....	72.5 x 67.5 x 22.0mm

Selection Guide

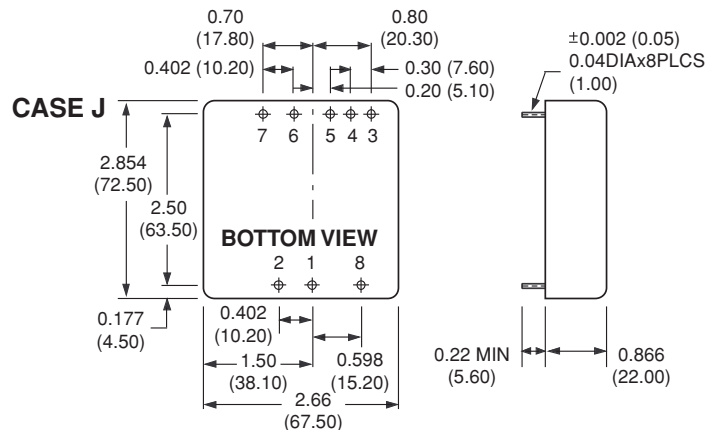
(Continued)

	Input Voltage Nominal (Range) (Vdc)	Output Voltage (Vdc)	Output Current (mA)	Model Number	Case
SINGLE OUTPUT VOLTAGE	12 (9-18)	5	5000	KW25-12S5	J
		12	2100	KW25-12S12	J
		15	1700	KW25-12S15	J
	24 (18-36)	5	5000	KW25-24S5	J
		12	2100	KW25-24S12	J
		15	1700	KW25-24S15	J
	48 (36-72)	5	5000	KW25-48S5	J
		12	2100	KW25-48S12	J
		15	1700	KW25-48S15	J
DUAL OUTPUTS	12 (9-18)	±5	±2500	KW25-12-5	J
		±12	±1250	KW30-12-12	J
		±15	±1000	KW30-12-15	J
	24 (18-36)	±5	±2500	KW25-24-5	J
		±12	±1250	KW30-24-12	J
		±15	±1000	KW30-24-15	J
	48 (36-72)	±5	±2500	KW25-48-5	J
		±12	±1250	KW30-48-12	J
		±15	±1000	KW30-48-15	J
TRIPLE OUTPUTS	12 (9-18)	5 / ±12	4000 / ±250	KW25-12S5-12	J
		5 / ±15	3500 / ±300	KW25-12S5-15	J
		+5 / -5 / 12	+4000 / -300 / 300	KW25-12S12-5	J
	24 (18-36)	5 / ±12	4000 / ±250	KW25-24S5-12	J
		5 / ±15	3500 / ±300	KW25-24S5-15	J
		+5 / -5 / 12	+4000 / -300 / 300	KW25-24S12-5	J
	48 (36-72)	5 / ±12	4000 / ±250	KW25-48S5-12	J
		5 / ±15	3500 / ±300	KW25-48S5-15	J
		+5 / -5 / 12	+4000 / -300 / 300	KW25-48S12-5	J

Mechanical Specifications

I/O Connections			
Pin	SINGLE	DUAL	TRIPLE *
1	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin
3	+Trim Down	-Vout V2	+Vout V2
4	Output Trim	Com2	Com2
5	-Trim Up	N/C	-Vout V3
6	+Vout	+Vout V1	+5 Vdc
7	-Vout	Com1	Com1
8	On/Off	On/Off	On/Off

\* For ±5Vdc/12Vdc Triple Voltage Units  
 V2 = -5Vdc, V3 = +12Vdc



All Dimensions are in inches (mm)



POLYTRON DEVICES, Inc.

P.O. Box 398, Paterson, New Jersey 07544 U.S.A.  
 Tel: (973)345-5885 Fax: (973)345-1264 • Email: sales@polytrondevices.com • www.polytrondevices.com