

DC/DC Converters

15 Watts JTA15 Series

XPiQ inc.

Intelligent Design Quality Product



Small Size 1.60" x 2.00" x 0.45"

Ultra Wide 4:1 Input

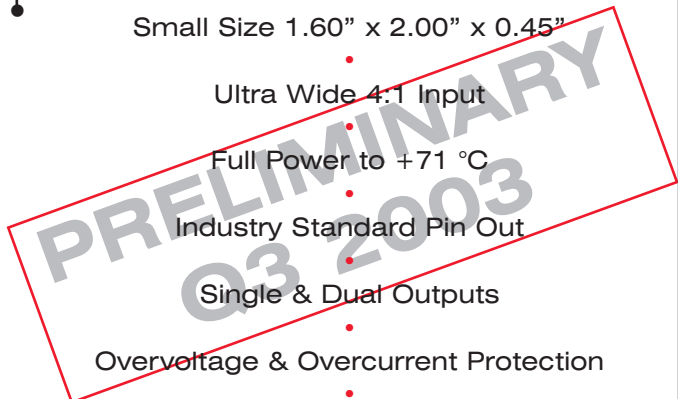
Full Power to +71 °C

Industry Standard Pin Out

Single & Dual Outputs

Overvoltage & Overcurrent Protection

UL Safety Approvals



Specification

Input

- Input Voltage*
- 9-36 VDC
18-75 VDC
- Input Current*
- 2.2 A max at 9 VDC input, 15 W output
- Remote ON/OFF*
- ON = Logic High or Open,
OFF = Logic Low or shorted to -Vin

Output

- Output Voltage*
- See Table
- Output Power*
- 15 Watts
- Output Voltage Adjustment*
- ±10%
- Minimum Load*
- 0 minimum load required
- Line Regulation*
- ±1% maximum
- Load Regulation*
- ±1% maximum for single output
±2% maximum for dual output
- Setpoint Accuracy*
- ±2%
- Ripple & Noise*
- 50 mV pk-pk for single output
75 mV pk-pk for dual output
- Transient Response*
- 4% max deviation,
recovering to 1% of final value in less
than 500 µs after a 25% load change
- Temperature Coefficient*
- ±0.02%/°C
- Overvoltage Protection*
- See table
- Overcurrent Protection*
- Continuous with auto recovery

General

- Efficiency*
- See table
- MTBF*
- 1,000,000 hrs minimum per
MIL-HDBK-217F
- Isolation Voltage*
- 1500 VDC Input to Output
- Package Style*
- Copper case with non-conductive base
- Size*
- 2.00" x 1.60" x 0.45"
- Weight*
- 50 grams approx

Environmental

- Operating Temperature*
- -25 °C to +100 °C derate from 100%
load at +71 °C to 0% load at +100 °C
- Cooling*
- Convection cooled
- Storage Temperature*
- -55 °C to +105 °C
- Humidity*
- 5-95% RH non-condensing

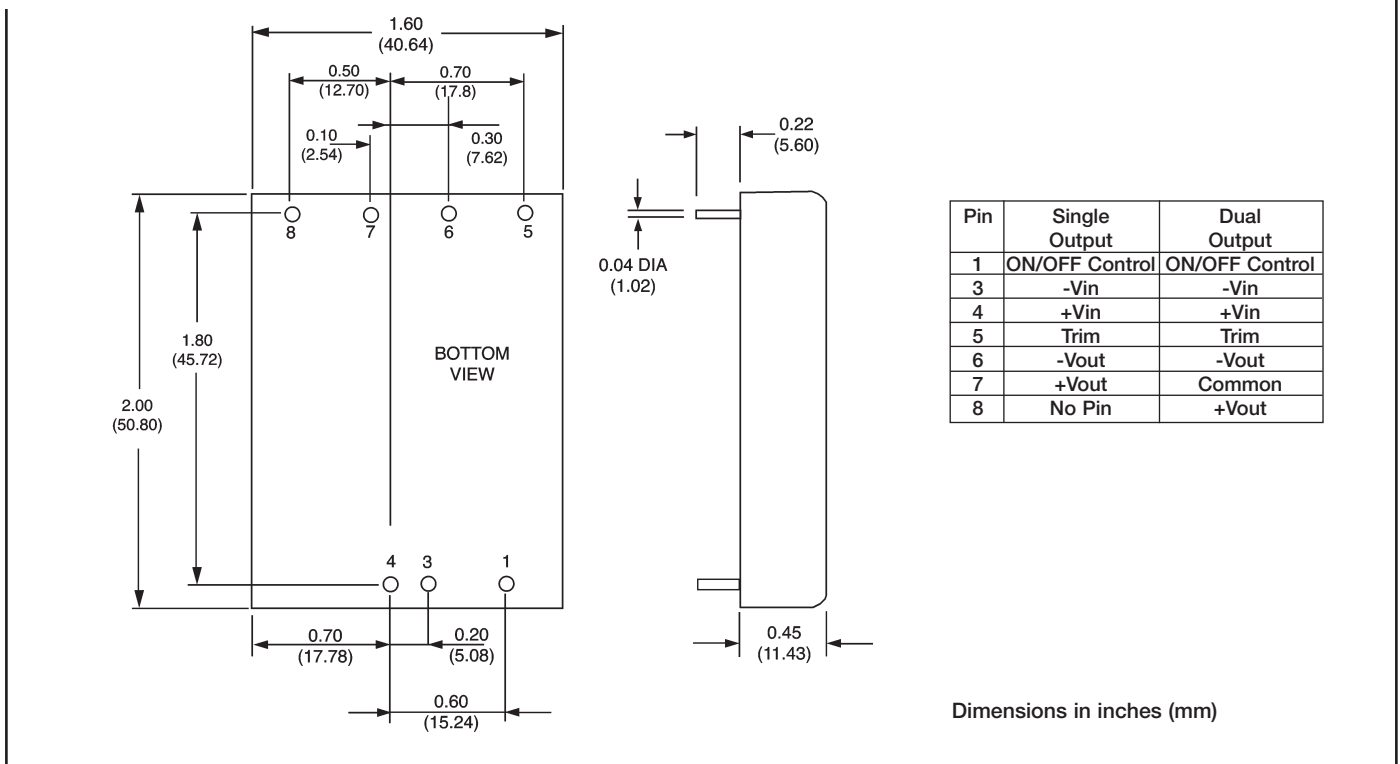
EMC & Safety

- Safety Approvals*
- UL/cUL 1950
- EMII/EMC*
- EN55022 Class B conducted

* Preliminary datasheet - see website for current specs

OUTPUT VOLTAGE & CURRENT RATINGS							JTA15	
Input Voltage	Maximum Power	Overvoltage Protection	Output 1		Output 2		Efficiency	Model Number
			V1nom	I _{max}	V2nom	I _{max}		
24 V (9-36)	15 W	6.8 V	5.0 V	3.000 A			80%	JTA1524S05
	15 W	15.0 V	12.0 V	1.250 A			82%	JTA1524S12
	15 W	18.0 V	15.0 V	1.000 A			82%	JTA1524S15
	15 W	6.8 V	5.0 V	1.500 A	-5.0 V	1.500 A	80%	JTA1524D01
	15 W	15.0 V	12.0 V	0.625 A	-12.0 V	0.625 A	82%	JTA1524D02
	15 W	18.0 V	15.0 V	0.500 A	-15.0 V	0.500 A	82%	JTA1524D03
48 V (18-75)	15 W	6.8 V	5.0 V	3.000 A			80%	JTA1548S05
	15 W	15.0 V	12.0 V	1.250 A			82%	JTA1548S12
	15 W	18.0 V	15.0 V	1.000 A			82%	JTA1548S15
	15 W	6.8 V	5.0 V	1.500 A	-5.0 V	1.500 A	80%	JTA1548D01
	15 W	15.0 V	12.0 V	0.625 A	-12.0 V	0.625 A	82%	JTA1548D02
	15 W	18.0 V	15.0 V	0.500 A	-15.0 V	0.500 A	82%	JTA1548D03

Mechanical Details



Derating Curve

