

# 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

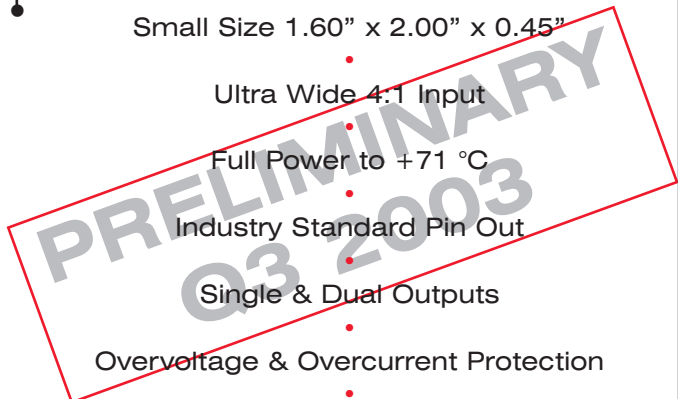
Full Power to +71 °C

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

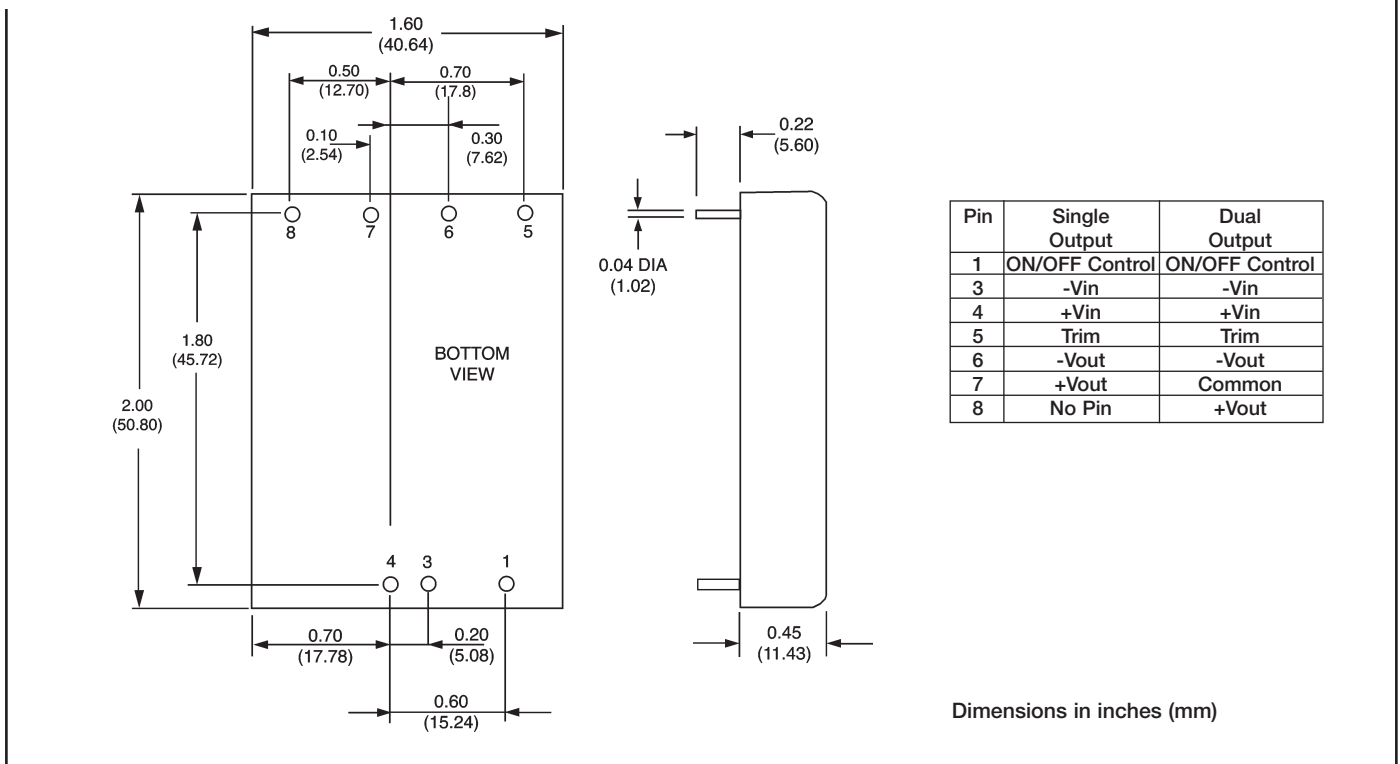
### EMC & Safety

- Safety Approvals** • UL/cUL 1950
- EMI/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 <sub>max</sub>	V2nom	I <sub>max</sub>		
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

