

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

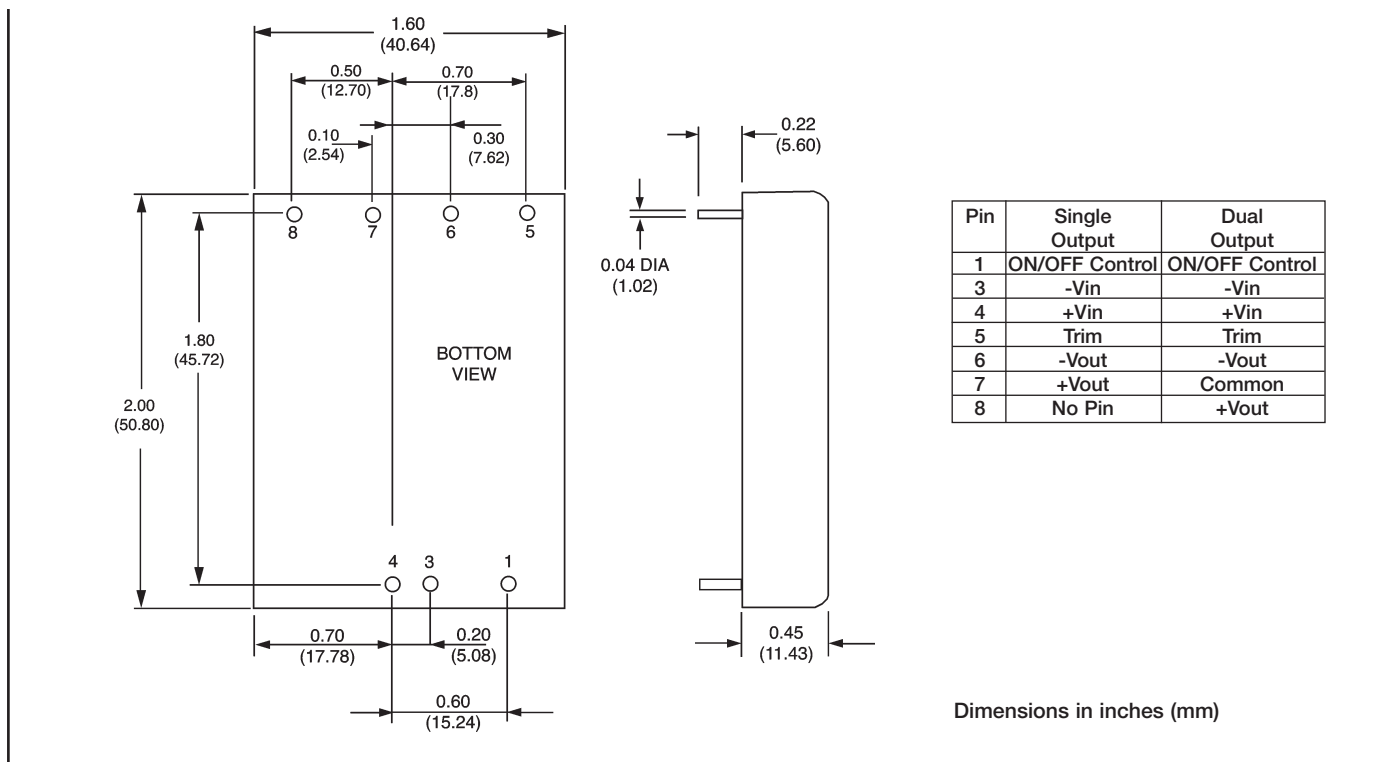
EMC & Safety

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	Output1		Output 2		Efficiency	Model Number
			V1nom	Imax	V2nom	Imax		
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

