Regulated DC/DC Converter 15Watt
4:1 Input Voltage Range Y15 Series

SPECIFICATIONS: Typical @ 25°C Under Full Load and Nominal Input Voltage Unless Otherwise Specified

INPUT
Input Voltage ..... 9-36 VdC
18-72 VdC
Input Filter ..... PI Network

OUTPUT
Voltage Accuracy. ..... + Output ± 1.5%
— Output ±2%
Line Regulation: ..... 10W, 15W Series: ± 1% Max
5W Series: ± 0.5% Max
Load Regulation: ..... 5W Series: ± 1% Max
10W Series: Single: ± 1% Max
Dual: ± 2% Max
15W Series: Single: ± 0.5% Max
Dual: ± 2% Max
Ripple and Noise (20 MHz BW): ..... 1% P-P Max

Transient Response (Full Load to 1/2 Load:) ..... 20m Sec Max to 1% of Final Value
Over Voltage Protection ..... Built-in
Short Circuit Protection ..... Fold Back

GENERAL
Efficiency: ..... 5W Series 72%
10W Series 80%
15W Series 86%
Isolation Voltage: ..... 500 VdC Min
Isolation Resistance: ..... 10^9 Ohms
Switching Frequency: ..... 5W and 10W Series: 50-70 KHz
15W Series: 100 KHz

ENVIRONMENTAL:
Operating Temperature: ..... — 25°C to + 71°C
Storage Temperature: ..... — 55°C to + 105°C
Temperature Coefficient: ..... 0.02% / °C Max
Cooling: ..... Free Air Convection
EMI/RFI: ..... Six Sided Continuous Metal Shield

PHYSICAL:
Case Size: ..... 2"x2"x0.4" (50.8x50.8x10.2mm)
Case Material: ..... Black Coated Copper with Non Conductive Metal Base
Weight: ..... 3 oz. (9 grams)

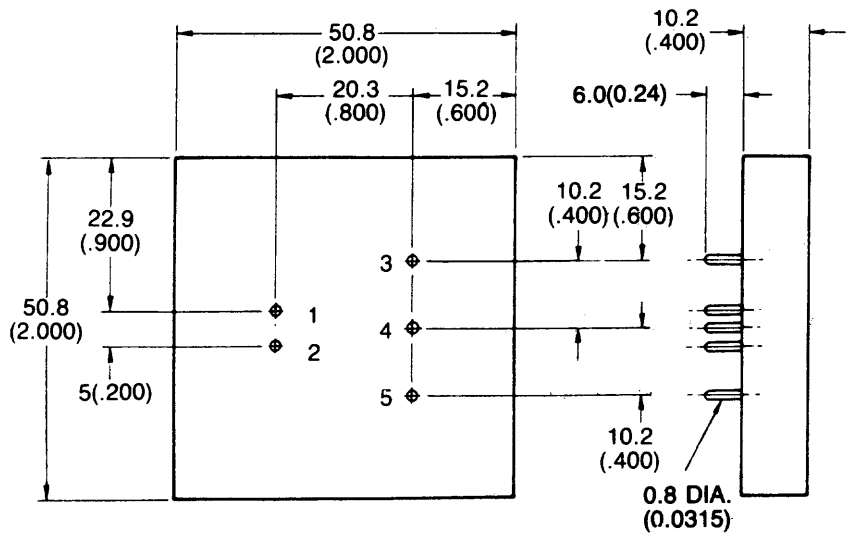
15W DC/DC CONVERTER

	INPUT VOLTAGE (VdC)	OUTPUT VOLTAGE (VdC)	OUTPUT CURRENT (mA)	MODEL NO.	CASE	PRICE 1-9 QTY.
SINGLE VOLTAGE	9-36	5	3000	Y15-12S5	B2	$98.00
		12	1250	Y15-12S12	B2	$98.00
		15	1000	Y15-12S15	B2	$98.00
	18-72	5	3000	Y15-24S5	B2	$98.00
		12	1250	Y15-24S12	B2	$98.00
		15	1000	Y15-24S15	B2	$98.00
DUAL VOLTAGE	9-36	±12	±625	Y15-12-12	B2	$105.00
		±15	±500	Y15-12-15	B2	$105.00
	18-72	±12	±625	Y15-24-12	B2	$105.00
		±15	±500	Y15-24-15	B2	$105.00

CASE B2

PIN	SINGLE	DUAL
1	+ INPUT	+ INPUT
2	— INPUT	— INPUT
3	+ OUTPUT	+ OUTPUT
4	NO PIN*	COMMON
5	— OUTPUT	— OUTPUT

*TRIM FOR 15W SERIES



Regulated DC/DC Converter 15Watt
4:1 Input Voltage Range Triple Voltage Y15 Series

SPECIFICATIONS: Typical @ 25°C Under Full Load and Nominal Input Voltage Unless Otherwise Specified

15W DC/DC CONVERTER TRIPLE VOLTAGE

INPUT

Input Voltage: .....9-36 Vdc
18-72 Vdc
Input Filter .....PI Network

OUTPUT

Voltage Accuracy: .....(+ V1 & — V2): ±2% Max
(+ V3): ± 3% Max
Line Regulation (@ Full Load): ..... ± 1% Max
Load Regulation (@ Full Load to 1/2 Load): ..... ± 2% Max
Ripple and Noise (20MHz BW) ..... 200 mVP-P
Transient Response (Full Load to 1/2 Load) ..... 200m SEC Max to 1% of Final Value

Short Circuit ..... Fold Back
Over Voltage Protection ..... Built-in

Cooling: ..... Free Air Convection
EMI/RFI: ..... Six Sided Continuous Metal Shield

PHYSICAL:

Case Size: .....3"x2.60"x 0.40"
(76.2 x 66.0 x 20.8mm)
Case Material: .....Black Coated Copper With Non-Conductive Metal Base
Weight: .....10 oz. (280 grams)

GENERAL

Efficiency (@ Full Load): 80%
Isolation Voltage: .....500 Vdc Min.
Isolation Resistance: .....1000 MOhms
Switching Frequency: .....50KHz Min.

ENVIRONMENTAL:

Operating Temperature Range: .....−25°C to +71°C
Storage Temperature Range: .....−55°C to +125°C
Cooling: .....Free Air Convection
EMI/RFI: .....Six Sided Continuous Metal Shield

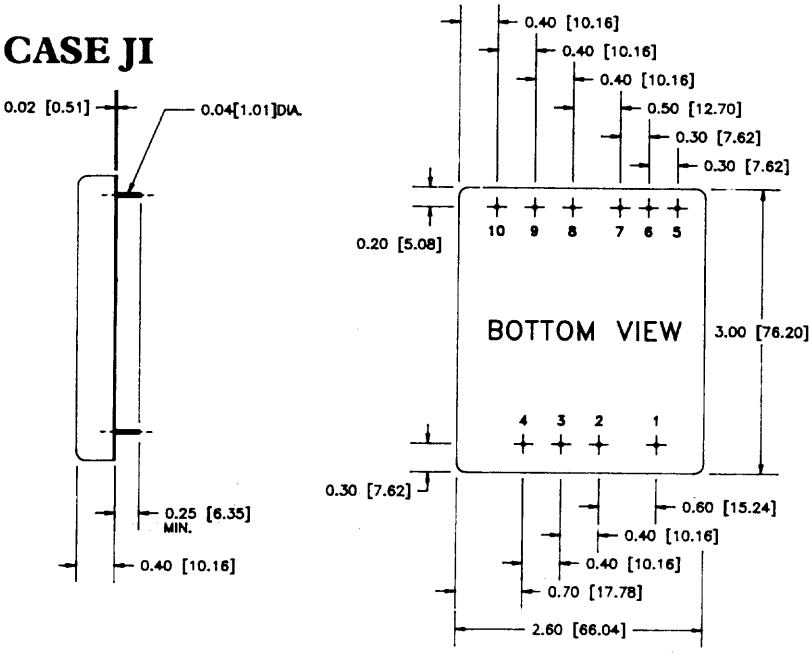
PHYSICAL:

Case Size: .....3"x2.60"x 0.40"
(76.2 x 66.0 x 20.8mm)
Case Material: .....Black Coated Copper With Non-Conductive Metal Base
Weight: .....10 oz. (280 grams)

	INPUT VOLTAGE (VdC)	OUTPUT VOLTAGE (VdC)	OUTPUT CURRENT (mA)	MODEL NO.	* CASE	PRICE 1-9 QTY.
TRIPLE VOLTAGE	9-36	5 / ± 12	1500 / ± 310	Y15-12S5-12	J1	$114.00
		5 / ± 15	1500 / ± 250	Y15-12S5-15	J1	$114.00
		12 / + 5 / — 5	300 / 1500 / 500	Y15-12S12-5	J1	$114.00
	18-72	5 / ± 12	1500 / ± 310	Y15-24S5-12	J1	$114.00
		5 / ± 15	1500 / ± 250	Y15-24S5-15	J1	$114.00
		12 / + 5 / — 5	300 / 1500 / 500	Y15-24S12-5	J1	$114.00

* Available in 2" X 2" X 0.40" package. Use suffix B2A after model number. Contact Factory for details.

CASE JI



PIN	SINGLE OUTPUT	DUAL OUTPUT	TRIPLE
1	REMOTE ON/OFF	REMOTE ON/OFF	PIN
2	+ INPUT	+ INPUT	+ INPUT
3	— INPUT	— INPUT	— INPUT
4	NO PIN	NO PIN	NO PIN
5	NO PIN	+ OUTPUT	+ OUTPUT
6	OUTPUT TRIM	COMMON	COMMON
7	NO PIN	— OUTPUT	— OUTPUT
8	+ OUTPUT	OUTPUT TRIM	+5V OUTPUT
9	— OUTPUT	NO PIN	NO PIN
10	NO PIN	NO PIN	NO PIN

website: www.polytrondevices.com • e-mail: polytron@erols.com
POLYTRON DEVICES, INC.
P.O. BOX 398, Paterson, NJ 07544 USA • Tel: (973) 345-5885 • FAX: (973) 345-1264