



WRA/B SERIES

WIDE INPUT VOLTAGE RANGE 3WATTS DC-DC CONVERTER

FEATURES

- 2:1 WIDE INPUT VOLTAGES:9-18V,18-36V,36-72V
- 3 WATTS 24PIN DIL(1.25x0.8x0.4inches) PACKAGE
- EFFICIENCY TO 82%
- PI INPUT FILTER

GENERAL SPECIFICATIONS

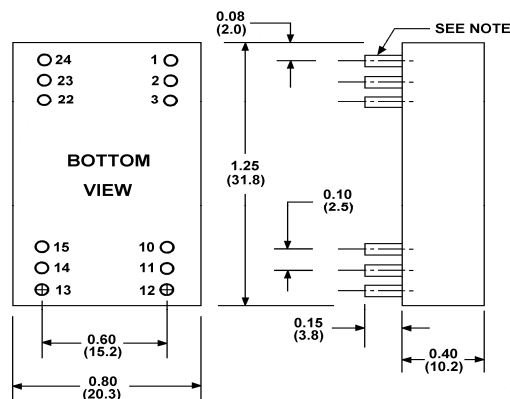
- SWITCHING FREQUENCY : 100KHz TYP.
- OUTPUT RIPPLE & NOISE : 100mVp-p(20MHz B.W.)
- ISOLATION VOLTAGE : 1500VDC
- ISOLATION RESISTANCE : 10^9 ohms
- STORAGE TEMPERATURE RANGE : -40°C TO 100°C
- OPERATING TEMPERATURE RANGE : -25°C TO +71°C
- SHORT CIRCUIT PROTECTION : CONTINUOUS
- CASE MATERIAL : BLACK COATED COPPER WITH NON-CONDUCTIVE BASE

ELECTRICAL SPECIFICATIONS

- INPUT VOLTAGE RANGE : 12V nominal ...9-18V
: 24V nominal ...18-36V
: 48V nominal ...36-72V
- OUTPUT VOLTAGE ACCURACY : $\pm 2\%$
- LINE REGULATION : $\pm 0.5\%$
- LOAD REGULATION(SINGLE) : $\pm 0.5\%$ (F.L. to 10% Load)
- LOAD REGULATION(DUAL) : $\pm 1.0\%$ (F.L. to 1 / 4 Load)
- EFFICIENCY : see table

PART NO.	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		EFFICIENCY (%)
				NO LOAD	FULL LOAD	
WRB1203(M)P-3W	9-18VDC	3.3VDC	1000mA	7.5mA	405mA	68
WRB1205(M)P-3W	9-18VDC	5VDC	1000mA	7.5mA	545mA	76
WRB1212(M)P-3W	9-18VDC	12VDC	470mA	7.5mA	585mA	80
WRB1215(M)P-3W	9-18VDC	15VDC	400mA	7.5mA	625mA	80
WRA1205(M)P-3W	9-18VDC	± 5 VDC	± 500 mA	12 A	545mA	76
WRA1212(M)P-3W	9-18VDC	± 12 VDC	± 230 mA	12 A	575mA	80
WRA1215(M)P-3W	9-18VDC	± 15 VDC	± 190 mA	12 A	590mA	80
WRB2403(M)P-3W	18-36VDC	3.3VDC	1000mA	5mA	195mA	70
WRB2405(M)P-3W	18-36VDC	5VDC	1000mA	5mA	265mA	78
WRB2412(M)P-3W	18-36VDC	12VDC	470mA	5mA	285mA	82
WRB2415(M)P-3W	18-36VDC	15VDC	400mA	5mA	305mA	82
WRA2405(M)P-3W	18-36VDC	± 5 VDC	± 500 mA	7.5mA	265mA	78
WRA2412(M)P-3W	18-36VDC	± 12 VDC	± 230 mA	7.5mA	285mA	81
WRA2415(M)P-3W	18-36VDC	± 15 VDC	± 190 mA	7.5mA	295mA	81
WRB4803(M)P-3W	36-72VDC	3.3VDC	1000mA	2mA	98mA	70
WRB4805(M)P-3W	36-72VDC	5VDC	1000mA	2mA	133mA	78
WRB4812(M)P-3W	36-72VDC	12VDC	470mA	2mA	145mA	81
WRB4815(M)P-3W	36-72VDC	15VDC	400mA	2mA	154mA	81
WRA4805(M)P-3W	36-72VDC	± 5 VDC	± 500 mA	3mA	265mA	78
WRA4812(M)P-3W	36-72VDC	± 12 VDC	± 230 mA	3mA	142mA	81

MARKINGS AND DIMENSIONS



Dimensions: inches/mm

Unless otherwise specified, all tolerances are $\pm 0.005/\pm 0.13$

PIN CONNECTION

PIN	SINGLE	DUAL
2,3	-INPUT	-INPUT
9	NC	COMMON
11	NC	-OUTPUT
14	+OUTPUT	+OUTPUT
16	-OUTPUT	COMMON
22,23	+INPUT	+INPUT