



FEATURES

- RoHS Compliant
- Low Cost
- Industry-Standard Package
- Single and Dual Outputs
- Internal Input and Output Filtering
- 24-Pin DIP Package
- Built-In Standoffs

MECHANICAL

1.5 Watt Unregulated Dual-in-Line DC/DC Converter OBSOLETE PRODUCT

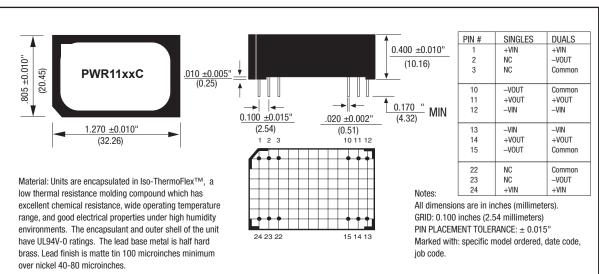
PWR11xxC

DESCRIPTION

The PWR11xxC Series offers a broad line of low-cost, high-performance, unregulated, single and dual output DC/DC converters in a 24-pin DIP package. These miniature converters offer better performance and lower cost in industry-standard packages and pin-outs. The PWR11xxC Series is internally filtered. No external parts are necessary.

Surface mounted components and a special encapsulant allow for superior reliability, excellent thermal dissipation, and an extended temperature range of -25° C to $+85^{\circ}$ C at no extra cost.

The PWR11xxC Series is ideal for use on high-density PC boards where isolated, unregulated, power is needed. Standoffs allow for PC board cleaning, helping preserve isolation. They also allow for visual inspection of solder joints.





www.murata-ps.com

Technical enquiries email: sales@murata-ps.com, tel: +1 508 339 3000

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1.5 Watt Unregulated Dual-in-Line DC/DC Converter

ELECTRICAL SPECIFICATIONS

Specifications typical at $T_A = +25^{\circ}$ C, nominal input voltage, and rated output current unless otherwise noted.

	NOMINAL	BATED	BATED	INPUT CURRENT		BEFLECTED
MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	NO LOAD	RATED LOAD	RIPPLE CURRENT
Units	VDC	VDC	mA	mA	mA	mAp-p
PWR1100C	5	5	300	30	400	45
PWR1101C	5	12	125	30	400	45
PWR1102C	5	15	100	30	400	45
PWR1103C		±5	±150		400	45
PWR1104C		±12	±63	30	400	45
PWR1105C	5	±15	±50		400	45
PWR1106C	12	5	300		175	
PWR1107C	12	12	125	30	175	25
PWR1108C	12	15	100	30	175	
PWR1109C	12	±5	±150	30	175	25
WR1110C	12	±12	±63		175	
PWR1111C	12	±15	±50		175	
PWR1112C	15	5	300	30	140	20
PWR1113C	15	12	125	30	140	20
PWR1114C	15	15	100		140	20
PWR1115C	15	±5	±150		140	20
PWR1116C	15	±12	±63		140	20
PWR1117C	15	±15	±50		140	20
WR1118C	24	5	300	30	90	20
PWR1119C	24	12	125		90	20
PWR1120C	24	15	100		90	20
PWR1121C	24	±5	±150		90	20
PWR1122C	24	±12	±63		90	20
PWR1123C	24	±15	±50	30	90	20
PWR1140C	5	9	167	30	400	45
PWR1141C	12	9	167		175	25
PWR1142C	15	9	167		140	20
PWR1143C	24	9	167	30	90	20

COMMON SPECIFICATIONS

Specifications typical at $T_A = +25^{\circ}$ C, nominal input voltage, and rated output current unless otherwise noted.

PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNITS
INPUT					
Voltage Range		4.5	5	5.5	VDC
		10.8	12	13.2	VDC
		13.5	15	16.5	VDC
		21.6	24	26.4	VDC
ISOLATION					
Rated Voltage		500			VDC
Test Voltage	60 Hz, 10 Seconds	500			Vpk
Resistance			10		GΩ
Capacitance			90		pF
Leakage Current	$V_{150} = 240$ VAC, 60 Hz		10		μÅrms
OUTPUT	150				
Bated Power			1.5		w
Voltage Setpoint Accuracy	Rated Load, Nominal V.		±3	±5	%
Temperature Coefficient	nateu Loau, Norrinar v _{in}		±0.02	±5	%/%°C
Ripple and Noise			±0.02		%0/%0 C
(BW = DC to 20MHz)	No External Components		150		mVp-p
(DW = DC (0.20) V (DZ)	10µF Across Each Output		10		mVrms
			30		
M-B	10µF Across Each Output		30	-	mVp-p
Voltage	No Load, $V_{OUT} = +5V$			7	VDC
	No Load, $V_{out} = \pm 12V$			±15	VDC
	No Load, $V_{out} = \pm 15V$			±18	VDC
Line Regulation			1.2		%/%V _{IN}
Load	No Load To Rated Load		6		%
GENERAL					
Switching Frequency			150		kHz
Package Weight			12		g
MTTF per MIL-HDBK-217 Rev. E	Circuit Stress Method		800		kHr
Efficiency			75		%
TEMPERATURE					
Specification		-25	+25	+85	°C
Operation		-40		+100	°C
Storage		-40		+110	°C

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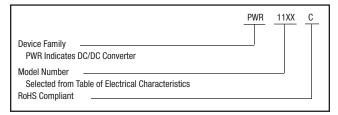
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ABSOLUTE MAXIMUM RATINGS

Output Short-Circuit Duration	
Internal Power Dissipation	

ORDERING INFORMATION



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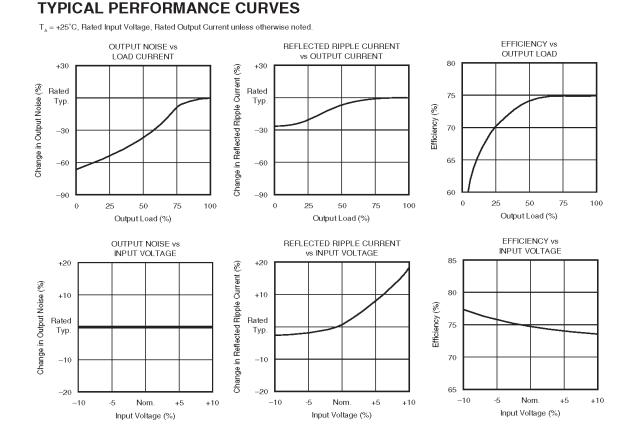
APPLICATION NOTE

UNBALANCED LOADS

Unbalanced loads may be used on dual output models with either side providing up to its rated current. Output voltages, by design, will track each other in an unbalanced state within $\pm 10\%$ of one another.

OUTPUT NOISE

Output noise can be reduced to 30mVp-p, typically, by adding a 10μ F tantalum capacitor with an equivalent series resistance (ESR) of less than $150m\Omega$ at 10kHz across each output.



THROUGH-HOLE SOLDERING INFORMATION

These devices are intended for wave soldering or manual soldering. They are not intended to be subject to surface mount processes under any circumstances.

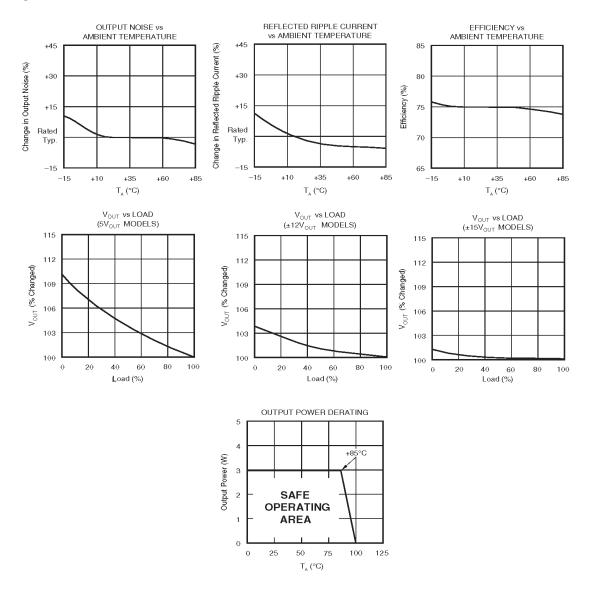
The normal wave soldering process can be used with these devices where the device is subjected to a maximum wave temperature of 260°C for a period of no more than 10 seconds. Within this time and temperature range, the integrity of the device's plastic body will not be compromised and internal temperatures within the converter will not exceed 175°C. Care should be taken to control manual soldering limits identical to that of wave soldering.

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T_A = +25°C, Rated Input Voltage, Rated Output Current unless otherwise noted.



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Murata Power Solutions, Inc.

www.murata-ps.com

11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.

Tel: (508) 339-3000 (800) 233-2765 Fax: (508) 339-6356

www.murata-ps.com email: sales@murata-ps.com ISO 9001 REGISTERED 07/16/08

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USA:	Mansfield (MA), Tel: (508) 339-3000, email: sales@murata-ps.com			
Canada:	Toronto, Tel: (866) 740-1232, email: toronto@murata-ps.com			
UK:	Milton Keynes, Tel: +44 (0)1908 615232, email: mk@murata-ps.com			
France:	Montigny Le Bretonneux, Tel: +33 (0)1 34 60 01 01, email: france@murata-ps.com			
Germany:	München, Tel: +49 (0)89-544334-0, email: munich@murata-ps.com			
Japan:	Tokyo, Tel: 3-3779-1031, email: sales_tokyo@murata-ps.com Osaka, Tel: 6-6354-2025, email: sales_osaka@murata-ps.com Website: www.murata-ps.jp			
China:	Shanghai, Tel: +86 215 027 3678, email: shanghai@murata-ps.com Guangzhou, Tel: +86 208 221 8066, email: guangzhou@murata-ps.com			

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