

CPR SERIES

3W REGULATED

DANUBE

FEATURES

- DUAL IN LINE PACKAGE
- UP TO 3W REGULATED OUTPUT POWER
- 100% BURNED IN
- FIVE-SIDED SHIELD TO REDUCE EMI
- LOW COST
- NO EXTERNAL COMPONENTS REQUIRED
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 3 YEARS WARRANTY



OUTPUT SPECIFICATIONS

Voltage Setpoint Accuracy	+/-5% max
Temperature Coefficient	+/-0.05%/°C
Ripple & Noise(20MHz BW) ¹	100mVp-p max
Line Regulation ²	+/-1% max
Load Regulation ³	+/-1% max
Minimum Load	10% of Full Load
Short Circuit Protection	Current Limit Protection
Short Circuit Restart	Automatic
Transient Response ⁵	200uS max

INPUT SPECIFICATIONS

Input Voltage Range	+/-10% max
Input Filter	Pi Network
Protection	Fuse Recommended

GENERAL SPECIFICATIONS

Efficiency	58% min
Isolation Voltage ⁴	2000 VDC min
Isolation Resistance	10 ⁹ ohms min
Isolation Capacitance	80pF max
Switching Frequency	50KHz min
MTBF ⁶	>850,000 Hours
Weight	12.0g-14.4g
Case Material	Non-Conductive Plastic Or Five-Sided Shield Case
Case Size	31.8mm*20.3mm*10.2mm
Conducted Emissions	EN55022 Class A
Radiated Emissions	EN55022 Class A

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25°C to +71°C
Storage Temperature	-55°C to +125°C
Humidity	95% max
Cooling	Free-Air Convection

ALL SPECIFICATIONS TYPICAL AT NOMINAL LINE, FULL LOAD , AND 25 °C UNLESS OTHERWISE NOTED.

¹ Measured with 1uF ceramic capacitor connect to the output pins.

² High Line to Low Line.

³ Load Regulation is for output load current change from 10% to 100%.

⁴ For 3 seconds.

⁵ 25% Step Load Change.

⁶ MIL-HDBK-217F @25 °C , Ground Benign.

● **SELECTION GUIDE**
3W OUTPUT

MODEL NUMBER ⁷	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ⁸		EFF (%) ⁹	ISOLATION (VDC)
				CURRENT(mA)			
				FULL LOAD	NO LOAD		
CPRS-0505(M)	4.5-5.5	5	600	970	70	62	2000
CPRS-0509(M)	4.5-5.5	9	330	950	70	63	2000
CPRS-0512(M)	4.5-5.5	12	250	930	70	65	2000
CPRS-0515(M)	4.5-5.5	15	200	950	70	63	2000
CPRS-0524(M)	4.5-5.5	24	125	940	70	64	2000
CPRS-1205(M)	10.8-13.2	5	600	410	30	61	2000
CPRS-1209(M)	10.8-13.2	9	330	400	30	63	2000
CPRS-1212(M)	10.8-13.2	12	250	380	30	66	2000
CPRS-1215(M)	10.8-13.2	15	200	360	30	69	2000
CPRS-1224(M)	10.8-13.2	24	125	360	30	69	2000
CPRS-2405(M)	21.6-26.4	5	600	200	20	63	2000
CPRS-2409(M)	21.6-26.4	9	330	190	20	66	2000
CPRS-2412(M)	21.6-26.4	12	250	190	20	66	2000
CPRS-2415(M)	21.6-26.4	15	200	190	20	66	2000
CPRS-2424(M)	21.6-26.4	24	125	190	20	66	2000
CPRS-4805(M)	43.2-52.8	5	600	100	10	63	2000
CPRS-4809(M)	43.2-52.8	9	330	100	10	63	2000
CPRS-4812(M)	43.2-52.8	12	250	100	10	63	2000
CPRS-4815(M)	43.2-52.8	15	200	100	10	63	2000
CPRS-4824(M)	43.2-52.8	24	125	100	10	63	2000

Note: Other input to output voltages may be available. Please contact factory.

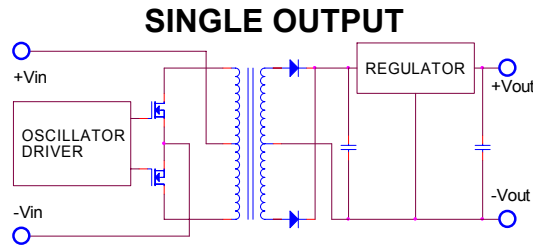
⁷ CPR*-**** ----- Non-Conductive Plastic

CPR*-****M ----- Five-sided shield case

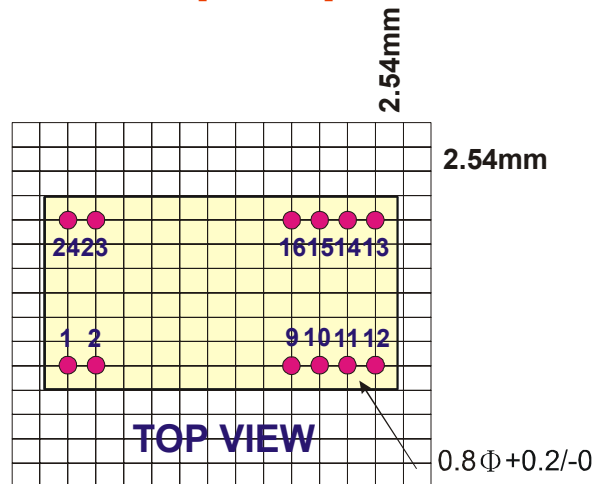
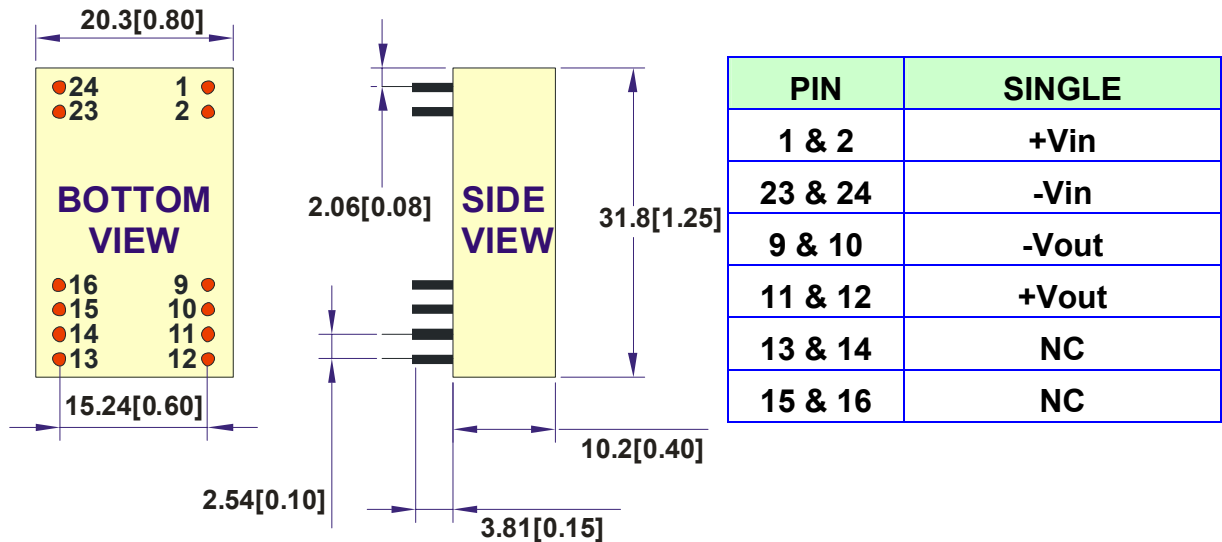
⁸ NOMINAL INPUT VOLTAGE.

⁹ NOMINAL INPUT VOLTAGE, FULL LOAD.

● SIMPLIFIED SCHEMATIC

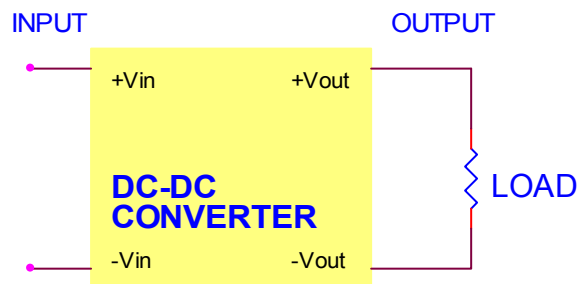


● MECHANICAL DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



● TYPICAL APPLICATIONS

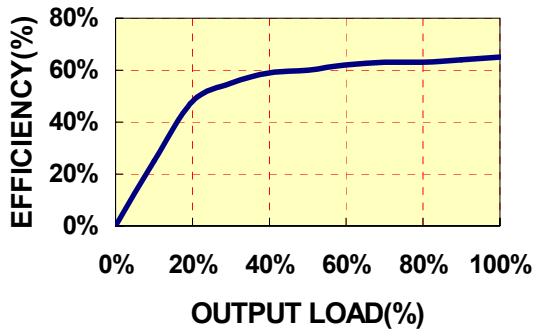
SINGLE OUTPUT



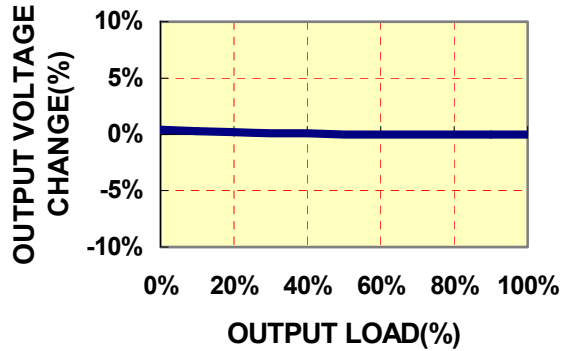
● TYPICAL PERFORMANCE CURVES

Specifications typical at TA=25°C, nominal input voltage, rated output current unless otherwise specified.

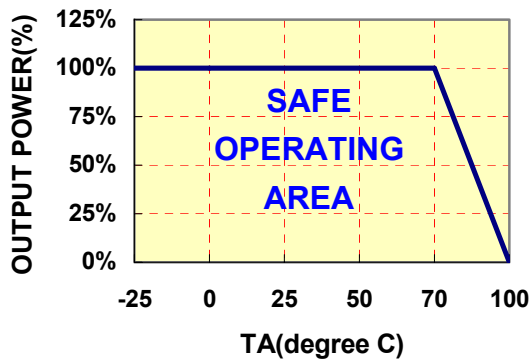
OUTPUT LOAD VS EFFICIENCY



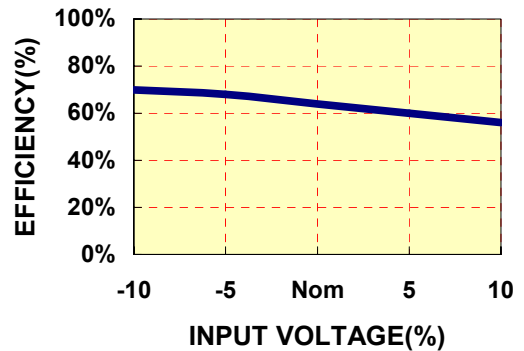
OUTPUT LOAD VS OUTPUT VOLTAGE



TEMPERATURE DERATING



INPUT VOLTAGE VS EFFICIENCY



● INPUT FUSE SELECTION GUIDE

4.5-5.5V	10.8-13.2V	21.6-26.4V	43.2-52.8V
INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)
1600mA Slow-Blow Type	800mA Slow-Blow Type	400mA Slow-Blow Type	200mA Slow-Blow Type

Note: Certain applications may require the installation of external fuse in front of the input.

CPR SERIES APPLICATION NOTES:

EXTERNAL CAPACITANCE REQUIREMENTS:

No external capacitance is required for operation of the CPR series.

To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 100KHz is required.

External output capacitance is not required for operation, however it is recommended that 10uF tantalum and 0.1uF ceramic capacitance be selected for reduced system noise.

Additional output capacitance may be added for increased filtering, but should not exceed 220uF.

We Can Offer EMC-Filter According To EN55011/22 Class B.

Negative Outputs:

A negative output voltage may be obtained by connecting the +OUT to circuit ground and connecting -OUT as the negative output.

FOR MORE INFORMATION CALL:

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Home Page

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