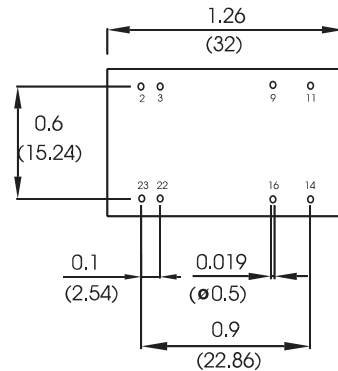


ISOLATED DC/DC CONVERTERS Compact P.W.M.

2CPR 3 WATT

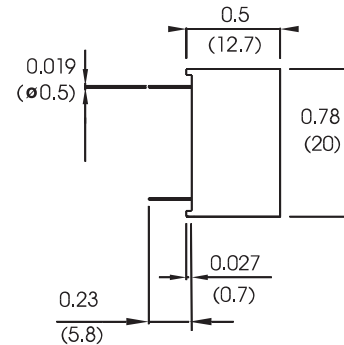


SINGLE DUAL
BOTTOM VIEW



Tolerances : $\pm 0,004$ Inches (Tolerances : $\pm 0,1$ mm)

SIDE VIEW



All dimensions in inches (millimeters)

Pin	Single output
2	-Input
3	-Input
9	N/C
11	N/C
14	+Output
16	-Output
22	+Input
23	+Input

Pin	Dual output
2	-Input
3	-Input
9	Common
11	-Output
14	+Output
16	Common
22	+Input
23	+Input

MODEL	INPUT SPECIFICATIONS			OUTPUT SPECIFICATIONS				
	minimum (Vdc)	maximum (Vdc)	nominal (Vdc)	Vout + (Vdc)	Iout + (mA)	Vout - (Vdc)	Iout - (mA)	power (W)
2 CPR1203 S	9,5	18,0	12	3,3	600			1,98
2 CPR 1205 S	9,5	18,0	12	5	600			3
2 CPR 1212 S	9,5	18,0	12	12	250			3
2 CPR 1215 S	9,5	18,0	12	15	200			3
2 CPR2403 S	18	36,0	24	3,3	600			1,98
2 CPR 2405 S	18	36,0	24	5	600			3
2 CPR 2412 S	18	36,0	24	12	250			3
2 CPR 2415 S	18	36,0	24	15	200			3
2 CPR4803 S	36	72,0	48	3,3	600			1,98
2 CPR 4805 S	36	72,0	48	5	600			3
2 CPR 4812 S	36	72,0	48	12	250			3
2 CPR 4815 S	36	72,0	48	15	200			3
2 CPR 1205 D	9,5	18,0	12	5	300	5	300	3
2 CPR 1212 D	9,5	18,0	12	12	125	12	125	3
2 CPR 1215 D	9,5	18,0	12	15	100	15	100	3
2 CPR 2405 D	18,0	36,0	24	5	300	5	300	3
2 CPR 2412 D	18,0	36,0	24	12	125	12	125	3
2 CPR 2415 D	18,0	36,0	24	15	100	15	100	3
2 CPR 4805 D	36,0	72,0	48	5	300	5	300	3
2 CPR 4812 D	36,0	72,0	48	12	125	12	125	3
2 CPR 4815 D	36,0	72,0	48	15	100	15	100	3

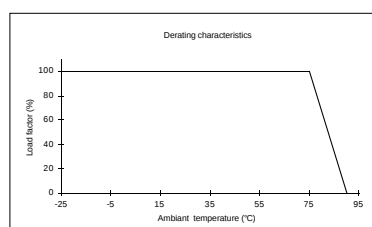
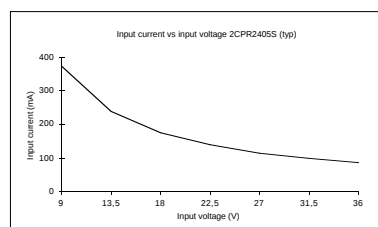
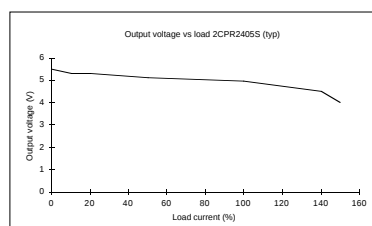
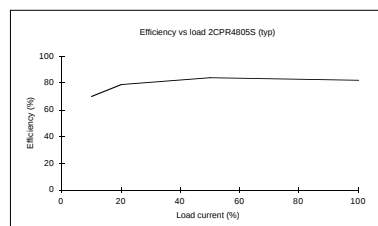
- NOTE 1 : These converters operate without any external components. However, in low noise applications it is commended that a low ESR capacitor be placed across the output or the input pins.
- Conducted noise filtering to EN 55022-B, VDE0871-B may be accomplished by putting an external capacitor. For more information, please contact factory.
- On dual output, the outputs are not isolated from each other and may be connected to provide 10 V, 24 V or 30 V.
- It is recommended to protect the input by fuses or other protection devices. Fuses are never supplied internally, and, without them, severe damage or even fire can occur in the event of a module failure. A slow fuse with a rating of 2X the I_{in} max is recommended.

ETRI 2CPR DC/DC Converters

3W

PARAMETERS	CONDITIONS	2 CPR								
Input voltage	Tc = - 25 °C to + 90 °C	12 V			24 V			48 V		
Input voltage range	Iout = 0 % to 100 %	9,5 V to 18 V			18 V to 36 V			36 V to 72 V		
Input over voltage	0,1secondMax.	20 V			40 V			80 V		
No load input current	Iout = 0 mA : Vin = Nom.	10 mA			5 mA			2 mA		
Output voltage	Iout = 100 % : Vin = Nom.	3,3 V*/5 V	12V	15V	3,3 V*/5 V	12V	15V	3,3 V*/5 V	12V	15V
Output current (Single)	Vin = Min. to Max.	600 mA	250mA	200mA	600mA	250mA	200mA	600mA	250 mA	200mA
Output current (Dual)	Tc = - 25 °C to + 90 °C	±300mA	±125mA	±100mA	±300mA	±125mA	±100mA	±300mA	±125mA	±100mA
Input current Max.	Vin = Min. : Iout = Max.	450 mA	400 mA		230 mA	200mA		125mA	100mA	
Efficiency	Vin = Nom. : Iout = Max.	72 %	83 %	86 %	75 %	85 %	88 %	75 %	85 %	88 %
Output voltage accuracy	Vin = Nom. : Iout = Max.	±3 %	±2 %		±3 %	±2 %		±3 %	±2 %	
Load regulation (Iout = 10% to 100%)	Vin = Nom.	+ 2 % to 0								
Line regulation (Vin = Min. to Max.)	Iout = Max.	±1 %								
Limitation range (Vin = Min. to Max.)	Vout = Vout - 4 %	180 % of Iout Max.								
Output ripple peak to peak	BW = 10 Hz to 20 MHz	120 mV								
Input filter (see note 1)		PI filter								
Temperature coefficient	Tc = - 25 °C to + 90 °C	≤ 0,02 % per % between - 40 °C to + 75 °C								
Input / Output isolation	1Minute	1500Vdc								
Isolation resistance	Vtest = 500 VDC	>10Gohm								
Input / Output coupling capacitor	Rh = 48 % : Tc = 25 °C	100 pF at 100 KHz								
Switching frequency	Vin = Nom. : Iout = Max.	170 KHz								
Operating temperature range	Ta:	- 25 °C to + 75 °C								
Storage temperature	Ts:	- 40 °C to + 105 °C								
Maximum package temperature	Tc:	+ 90 °C								
MTBF : MIL-HDBK-217, Rev E	Ground bening, Ta = 25 °C	> 1 500 000 h								
Weight	Gr	15 Gr								

PERFORMANCE CURVES



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