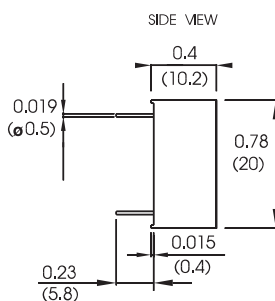
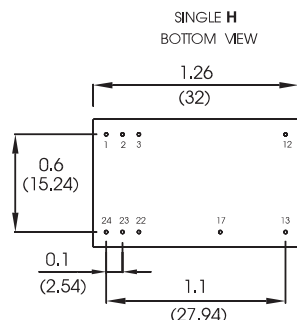
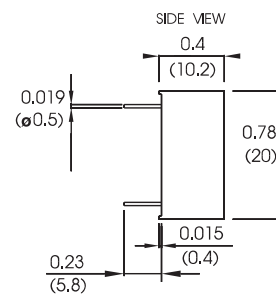
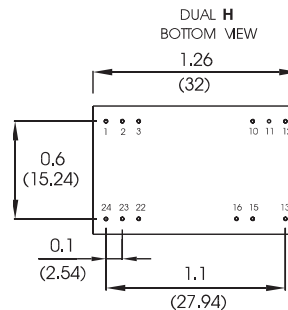


ISOLATED DC/DC CONVERTERS Regulated

2CHR 0.5/2 WATT



Tolerances : ± 0.004 Inches (Tolerances : ± 0.1 mm)
All dimensions in inches (millimeters)



Tolerances : ± 0.004 inches (Tolerances : ± 0.1 mm)
All dimensions in inches (millimeters)

SINGLE H

Pin	Single output
1	+Input
2	+Input
3	+Input
12	-Output
13	+Output
17	TP+
22	-Input
23	-Input
24	-Input

DUAL H

Pin	Dual output
1	+Input
2	+Input
3	+Input
10	Common
11	Common
12	TP-
13	-Output
15	+Output
16	TP+
22	-Input
23	-Input
24	-Input

MODEL	INPUT SPECIFICATIONS			OUTPUT SPECIFICATIONS				
	minimum	maximum	nominal	Vout +	Iout +	Vout -	Iout -	power
	(Vdc)	(Vdc)	(Vdc)	(Vdc)	(mA)	(Vdc)	(mA)	(W)
2 CHR 0505 S	4,75	5,5	5	5	100			0,50
2 CHR 0512 S	4,75	5,5	5	12	100			1,20
2 CHR 0515 S	4,75	5,5	5	15	100			1,50
2 CHR 1205 S	10,8	13,2	12	5	100			0,50
2 CHR 1212 S	10,8	13,2	12	12	100			1,20
2 CHR 1215 S	10,8	13,2	12	15	100			1,50
2 CHR 2405 S	21,6	26,4	24	5	100			0,50
2 CHR 2412 S	21,6	26,4	24	12	100			1,20
2 CHR 2415 S	21,6	26,4	24	15	100			1,50
2 CHR 0505 D	4,75	5,5	5	5	90	5	90	0,90
2 CHR 0512 D	4,75	5,5	5	12	80	12	80	1,92
2 CHR 0515 D	4,75	5,5	5	15	65	15	65	1,95
2 CHR 1205 D	10,8	13,2	12	5	90	5	90	0,90
2 CHR 1212 D	10,8	13,2	12	12	80	12	80	1,92
2 CHR 1215 D	10,8	13,2	12	15	65	15	65	1,95
2 CHR 2405 D	21,6	26,4	24	5	90	5	90	0,90
2 CHR 2412 D	21,6	26,4	24	12	80	12	80	1,92
2 CHR 2415 D	21,6	26,4	24	15	65	15	65	1,95

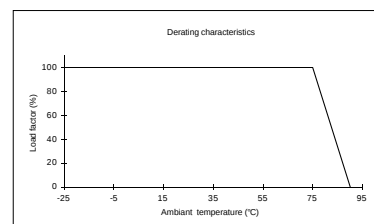
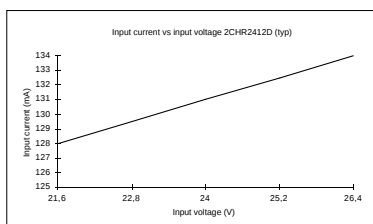
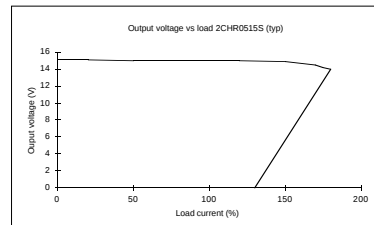
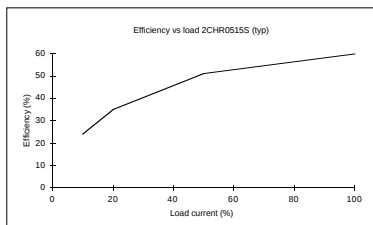
- NOTE 1 : These converters operate without any external components. However, in low noise applications it is commended that a low ESR capacitor be placed across the output or the input pins.
- Conducted noise filtering to EN 55022-B, VDE0871-B may be accomplished by putting an external capacitor. For 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 2CHR DC/DC Converters

0.5/2W

PARAMETERS	CONDITIONS	2 CHR								
Input voltage	Tc = - 25 °C to + 90 °C	5 V			12 V			24 V		
Input voltage range	Iout=0% to 100 %	4,75 V to 5,5 V			10,8 V to 13,2 V			21,6 V to 26,4 V		
Input over voltage	0,1secondMax.	10V			20 V			32 V		
No load input current	Iout=0 mA : Vin=Nom.	80 mA			50 mA			30 mA		
Output voltage	Iout=100% : Vin=Nom.	5 V	12V	15V	5 V	12V	15V	5 V	12V	15V
Output current (Single)	Vin=Min. to Max.	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA
Output current (Dual)	Tc = - 25 °C to + 90 °C	±90 mA	±80 mA	±65 mA	±90 mA	±80 mA	±65 mA	±90 mA	±80 mA	±65 mA
Input current Max.	Vin=Min. : Iout=Max.	300 mA	650 mA		130 mA	250 mA		80 mA	130 mA	
Efficiency	Vin=Nom. : Iout=Max.	60 %		65 %	60 %		65 %	60 %		65 %
Output voltage accuracy	Vin=Nom. : Iout=Max.	±5%								
Load regulation (Iout=10% to 100%)	Vin=Nom.	1%			0,5%					
Line regulation (Vin=Min. to Max.)	Iout=Max.	±0,5 %			±0,25 %					
Limitation range (Vin=Min. to Max.)	Vout= Vout - 4 %	180% of IoutMax.								
Output ripple peak to peak	BW = 10 Hz to 20 MHz	60 mV								
Input filter (see note 1)		PI filter								
Temperature coefficient	Tc = - 25 °C to + 90 °C	≤ 0,02 % per °C between - 25 °C to + 75 °C								
Input / Output isolation	1Minute	3000 VDC / 1500 VAC rms								
Isolationresistance	Vtest = 500 VDC	>10Gohm								
Input / Output coupling capacitor	Rh = 48 % : Tc = 25 °C	20 pF at 100 Hz								
Switching frequency	Vin=Nom. : Iout=Max.	40 KHz								
Operating temperature range	Ta:	- 25 °C to + 75 °C								
Storage temperature	Ts:	- 40 °C to + 105 °C								
Maximumpackage temperature	Tc:	+ 90 °C								
MTBF: MIL-HDBK-217, Rev E	Ground bening, Ta = 25 °C	> 1.000.000 h								
Weight	Gr	12Gr								

PERFORMANCE CURVES



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