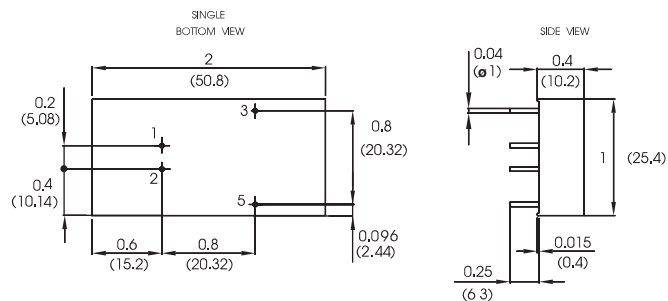
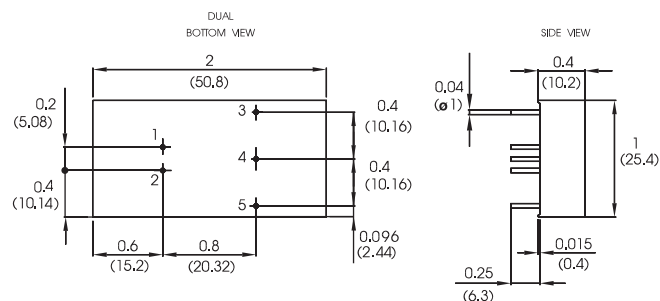


ISOLATED DC/DC CONVERTERS Industrial P.W.M.

7DCR



Tolerances : $\pm 0,004$ Inches (Tolerances : $\pm 0,1$ mm)
All dimensions in Inches (millimeters)



Tolerances : $\pm 0,004$ Inches (Tolerances : $\pm 0,1$ mm)
All dimensions in Inches (millimeters)

Pin	Single output
1	+Input
2	-Input
3	+Output
5	-Output

Pin	Dual output
1	+Input
2	-Input
3	+Output
4	Common
5	-Output

MODEL	INPUT SPECIFICATIONS			OUTPUT SPECIFICATIONS				
	minimum	maximum	nominal	Vout +	Iout +	Vout -	Iout -	power
	(Vdc)	(Vdc)	(Vdc)	(Vdc)	(mA)	(Vdc)	(mA)	(W)
7 DCR 0505 S	4,5	6,0	5	5	800			4,00
7 DCR 0512 S	4,5	6,0	5	12	420			5,04
7 DCR 0515 S	4,5	6,0	5	15	340			5,10
7 DCR 1205 S	9,0	18,0	12	5	800			4,00
7 DCR 1212 S	9,0	18,0	12	12	420			5,04
7 DCR 1215 S	9,0	18,0	12	15	340			5,10
7 DCR 2405 S	18,0	36,0	24	5	800			4,00
7 DCR 2412 S	18,0	36,0	24	12	420			5,04
7 DCR 2415 S	18,0	36,0	24	15	340			5,10
7 DCR 4805 S	36,0	63,0	48	5	800			4,00
7 DCR 4812 S	36,0	63,0	48	12	420			5,04
7 DCR 4815 S	36,0	63,0	48	15	340			5,10
7 DCR 0505 D	4,5	6,0	5	5	400	5	400	4,00
7 DCR 0512 D	4,5	6,0	5	12	210	12	210	5,04
7 DCR 0515 D	4,5	6,0	5	15	170	15	170	5,10
7 DCR 1205 D	9,0	18,0	12	5	400	5	400	4,00
7 DCR 1212 D	9,0	18,0	12	12	210	12	210	5,04
7 DCR 1215 D	9,0	18,0	12	15	170	15	170	5,10
7 DCR 2405 D	18,0	36,0	24	5	400	5	400	4,00
7 DCR 2412 D	18,0	36,0	24	12	210	12	210	5,04
7 DCR 2415 D	18,0	36,0	24	15	170	15	170	5,10
7 DCR 4805 D	36,0	63,0	48	5	400	5	400	4,00
7 DCR 4812 D	36,0	63,0	48	12	210	12	210	5,04
7 DCR 4815 D	36,0	63,0	48	15	170	15	170	5,10

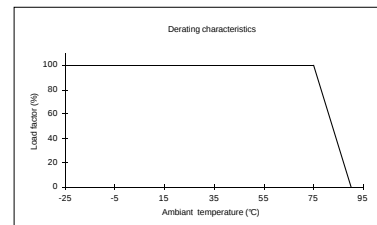
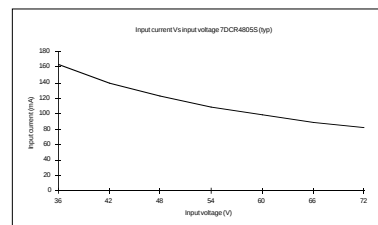
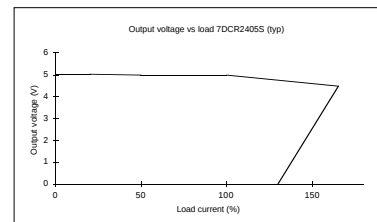
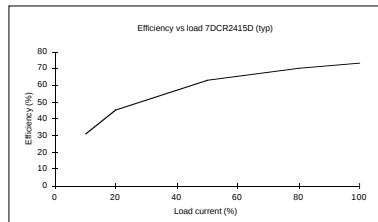
- NOTE 1 : These converters operate without any external components. However, in low noise applications it is commended that a low ESR capacitor be placed across the output or the input pins.
- Conducted noise filtering to EN 55022-B, VDE0871-B may be accomplished by putting an external capacitor. For 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 7DCR DC/DC Converters

4/5W

PARAMETERS	CONDITIONS	7 DCR											
Input voltage	Tc = - 25 °C to + 90 °C	5 V			12V			24 V			48 V		
Input voltage range	Iout = 0% to 100 %	4,5 V to 6 V			9 V to 18 V			18 V to 36 V			36 V to 63 V		
Input over voltage	0,1secondMax.	7 V			25 V			40 V			70 V		
No load input current	Iout = 0 mA : Vin = Nom.	400 mA			100 mA			40 mA			20 mA		
Output voltage	Iout = 100 % : Vin = Nom.	5 V	12V	15V	5 V	12V	15V	5 V	12V	15V	5 V	12V	15V
Output current (Single)	Vin = Min. to Max.	800mA	420 mA	340 mA	800mA	420 mA	340 mA	800 mA	420mA	340mA	800mA	420 mA	340 mA
Output current (Dual)	Tc = - 25 °C to + 90 °C	± 400 mA	±210mA	±170mA	± 400 mA	±210mA	±170mA	± 400 mA	±210mA	±170mA	± 400 mA	±210mA	±170mA
Input current Max.	Vin = Min. : Iout = Max.	1400 mA	1635 mA		635 mA	770 mA		320 mA	390 mA		150 mA	190 mA	
Efficiency	Vin = Nom. : Iout = Max.	65 %	68 %		70 %	72 %		70 %	72 %		74 %		
Output voltage accuracy	Vin = Nom. : Iout = Max.	±2 %											
Load regulation (Iout = 10% to 100%)	Vin = Nom.	0,5 %											
Line regulation (Vin = Min. to Max.)	Iout = Max.	± 0,25 %											
Limitation range (Vin = Min. to Max.)	Vout = Vout - 4 %	180% of Iout Max.											
Output ripple peak to peak	BW = 10 Hz to 20 MHz	50 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	1500 VDC											
Isolation resistance	Vtest = 500 VDC	>10Gohm											
Input / Output coupling capacitor	Rh = 48 % : Tc = 25 °C	120 pF at 100 Hz											
Switching frequency	Vin = Nom. : Iout = Max.	250 KHz to 750 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	> 500.000 h											
Weight	Gr	25 Gr											

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