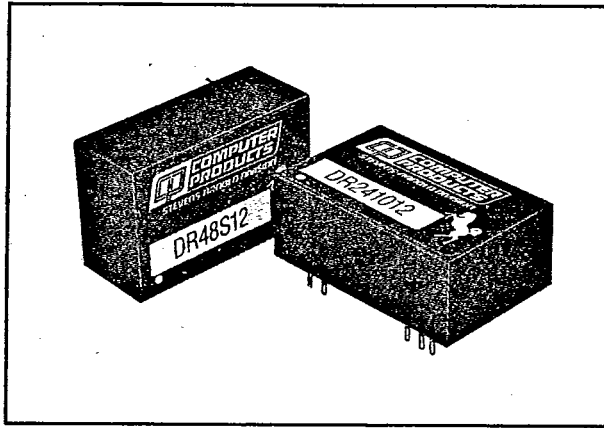


T-57-11



NEW! **DR SERIES**
Single and Dual Output

- Utilizes Surface Mount Technology
- 2:1 Input Range
- 6 Watts/Cubic Inch
- Hybrid Quality and Lower Cost
- Efficiency to 84%
- 200 kHz Switching Frequency

The DR Series is the industry's first series of hybridized single and dual output DC/DC converters which tolerate wide (2:1) input ranges, and directly plug into 24 pin DIP sockets. Available models consist of 18-36VDC and 36-72VDC input ranges with regulated, protected outputs of 5, 12, 15 VDC (single) and ± 5 , ± 12 , ± 15 VDC (duals). These miniature converters utilize surface mount devices (SMD) installed by means of automated assembly techniques. All models are encased in a low profile 0.8" \times 1.25" \times 0.5"H package ideally suiting them for .75" on center card cage applications. The high efficiency, up to 84%, assures cool and reliable operation. The economically priced DR Series achieves all specifications without the need for external components. The price, performance and functionality of this family of converters ideally suit them for on-board logic or analog voltages, cellular and portable telecommunication systems.

STOCKED BY YOUR LOCAL DISTRIBUTOR
(SEE LIST ON PAGES 173 & 174)



SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Voltage Accuracy, Single Output $\pm 1.0\%$, max.
 Dual Outputs, + Output $\pm 1.0\%$, max.
 Voltage Balance, Balanced Load
 Dual Outputs $\pm 2\%$, max.
 Ripple and Noise, 20 MHz BW
 Singles 150 mV P-P, max.
 Duals 150 mV P-P, max.
 Temperature Coefficient $\pm 0.02\%/^{\circ}\text{C}$, max.
 Current Limit 140% I_{out}
 Short Circuit Protection 10 sec., max.
 Overvoltage Clamp 125% V_{out}

INPUT SPECIFICATIONS

Input Voltage Range See Table
 Input Filter Pi Type

GENERAL SPECIFICATIONS

Efficiency See Table
 Isolation Voltage 500 VDC, min.
 Isolation Resistance 10^7 ohms, min.
 Isolation Capacitance 300 pF
 Switching Frequency 200 kHz

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range . . . -25°C to +71°C
 Derating None
 Storage Temperature Range . . . -40°C to +125°C
 Cooling Free Air Convection

PHYSICAL SPECIFICATIONS

Weight 0.5 oz. (14.2 grams)
 Case Material Non-Conductive Black Plastic

TWO-YEAR WARRANTY

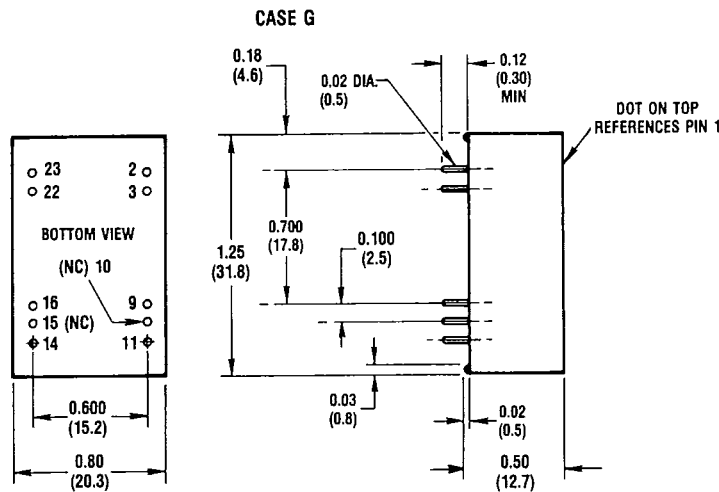


T-57-11

3 Watt DC/DC Converters

INPUT VOLTAGE ¹	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT ¹		% EFF	REGULATION ²		CASE	MODEL NUMBER
			NO LOAD	FULL LOAD		LINE ³	LOAD ⁴		
SINGLE OUTPUT									
18-36 VDC	5 VDC	500 mA	5 mA	134 mA	78	± 1.5%	± 2.5%	G	DR24S05/500G
18-36 VDC	12 VDC	250 mA	5 mA	151 mA	83	± 1.5%	± 2.5%	G	DR24S12/250G
18-36 VDC	15 VDC	200 mA	5 mA	151 mA	83	± 1.5%	± 2.5%	G	DR24S15/200G
36-72 VDC	5 VDC	500 mA	5 mA	66 mA	79	± 1.5%	± 2.5%	G	DR48S05/500G
36-72 VDC	12 VDC	250 mA	5 mA	75 mA	84	± 1.5%	± 2.5%	G	DR48S12/250G
36-72 VDC	15 VDC	200 mA	5 mA	75 mA	84	± 1.5%	± 2.5%	G	DR48S15/200G
DUAL OUTPUT									
18-36 VDC	± 5 VDC	± 250 mA	5 mA	132 mA	79	± 1.5%	± 2.5%	G	DR24D05/250G
18-36 VDC	± 12 VDC	± 125 mA	5 mA	152 mA	82	± 1.5%	± 2.5%	G	DR24D12/125G
18-36 VDC	± 15 VDC	± 100 mA	5 mA	152 mA	82	± 1.5%	± 2.5%	G	DR24D15/100G
36-72 VDC	± 5 VDC	± 250 mA	5 mA	65 mA	80	± 1.5%	± 2.5%	G	DR48D05/250G
36-72 VDC	± 12 VDC	± 125 mA	5 mA	75 mA	84	± 1.5%	± 2.5%	G	DR48D12/125G
36-72 VDC	± 15 VDC	± 100 mA	5 mA	75 mA	84	± 1.5%	± 2.5%	G	DR48D15/100G

- NOTES: 1. Nominal input 24 or 48 VDC.
 2. Maximum.
 3. Low Line to High Line.
 4. Full Load to 1/4 Full Load: Dual outputs loaded equally.



ALL DIMENSIONS IN INCHES (mm)

Pin Connections		
Single	Dual	Function
22 & 23	22 & 23	+ Input
2 & 3	2 & 3	- Input
14	14	+ Output
NC	9 & 16	Common
16	11	- Output

Tolerance .xx = ± 0.02
 .xxx = ± 0.005