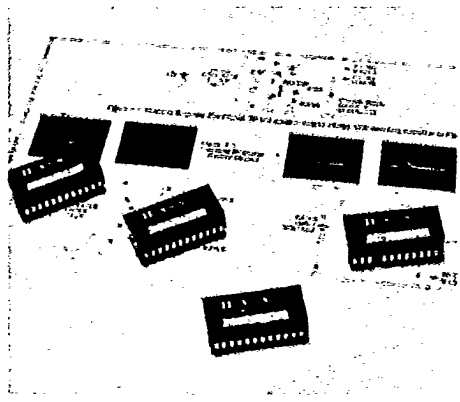


1 Watt Low-Cost DC-DC Converters/DCR (Regulated) DCU (Unregulated)



Specifications Typical at +25°C	DCU	DCR
Input Voltage Range 5 Volt Units 12 Volt Units	4.75 – 5.25VDC (5.5 max.) 10.8 – 13.2VDC (13.5 max.)	
Maximum Input Current 5 Volt Units 12 Volt Units	400mA 200mA	
Input to Output Isolation	300VDC min., 10 ⁹ Ω/20pF	
Output Voltage Tolerance	± 10%	± 5%
Output Ripple	50 mV rms (20Hz to 20MHz BW)	
Load Regulation Dual Output NL to 80mA Single Output NL to FL	± 5% ± 5%	< 45mV < 150mV
Short Circuit Protection	Current Limit	
Temperature Range Operating Storage	-25°C to +85°C -35°C to +125°C	-25°C to +85°C -35°C to +125°C
Temperature Coefficient	± 0.05%/°C	± 0.015%/°C

DCR (Regulated)

INPUT: 5, 12VDC
OUTPUT: 5, ±5, 12, ±12, 15, ±15

DCU (Unregulated)

INPUT: 5, 12VDC
OUTPUT: 5, ±12, ±15

- Small 24-Pin DIP Package
- Short Circuit Protected
- Outputs Regulated (DCRs) or Unregulated (DCUs)
- Fully Floating Outputs
- Low Output Ripple and Noise
- MTBF > 125,000 Hours

Individual Model Characteristics (Typical at +25°C)

Model	Input Voltage VDC	Output VDC @ mA	Case
DCR 5/5	5	5 @ 100	A
DCR 12/5	12	5 @ 100	A
DCR 5/12	5	12 @ 80	A
DCR 12/12	12	12 @ 80	A
DCR 5/15	5	15 @ 65	A
DCR 12/15	12	15 @ 65	A
DCR 5/5-5	5	±5 @ 100	B
DCR 5/12-12	5	±12 @ 80	B
DCR 12/12-12	12	±12 @ 80	B
DCR 5/15-15	5	±15 @ 65	B
DCR 12/15-15	12	±15 @ 65	B

Individual Model Characteristic (Typical at +25°C)

Model	Input Voltage VDC	Output VDC @ mA	Case
DCU 5/5	5	5 @ 200	A
DCU 12/5	12	5 @ 200	A
DCU 5/12-12	5	±12 @ 80	C
DCU 5/15-15	5	±15 @ 65	C
DCU 12/15-15	12	±15 @ 65	C

- (1) On dual output devices, the percent load applies to total load current on both sides.
- (2) Ripple and noise are measured over 20Hz to 20MHz bandwidth with 15µf capacitors connected to the output. For lower noise applications, value of the capacitors should be increased.
- (3) For ±12 volt output devices, the total current is 80mA. If used as a 24 volt supply, maximum current is 40mA.
- (4) Total load is one watt split between the outputs. For ±15 volt output devices, the total current is 65mA. If used as a 30 volt supply, maximum current is 33mA.

