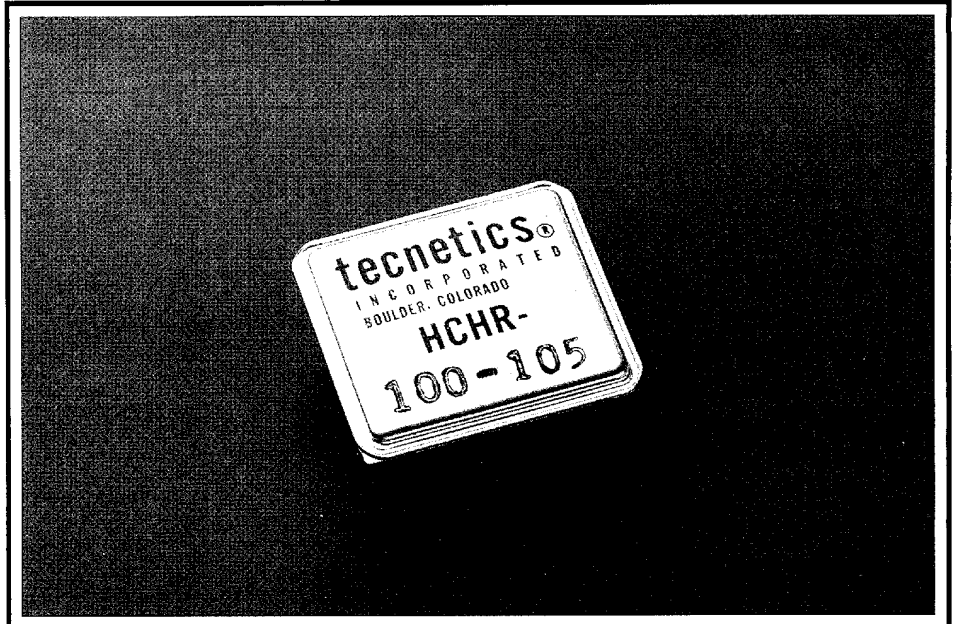


3 WATT DC/DC Power Supply

Catalog HCHR Series

FEATURES

- Inputs from 5 to 28 VDC
- Single and Dual Outputs
- Small, Ruggedized Package
- 9 Watts/in³
- Efficiencies up to 80%
- Mil-Spec Components
- Input-Output Isolation
- PC Mount
- Switching Frequency 24 kHz typ
- Special Outputs Available



SPECIFICATIONS

Electrical

SINGLE OUTPUT SELECTION CHART

Model Number	Output Voltage VDC (Nom.)	Output Current mA (Max.)	Input Voltage (VDC) 5±1	Output Current mA (Max.)	Input Voltage (VDC)				
					12±2	15±2	20±3	24±4	28±4
005	5	400	-105	500	-112	-115	-120	-124	-128
009	9	253		309					
010	10	235		285					
012	12	208		250					
015	15	167		200					
018	18	139		167					
024	24	104		125					
028	28	89		108					
075	75	33		40					
150	150	17		20					
200	200	13	-105	15					
300	300	—	—	10	-112	-115	-120	-124	-128
INPUT CURRENT		Full Load	830		390	310	230	200	170
(mAmps)		No Load	180		100	80	90	60	45

DUAL OUTPUT SELECTION CHART

Model Number	Output Voltage VDC (Nom.)	Output Current mA (Max.)	Input Voltage (VDC) 5±1	Output Current mA (Max.)	Input Voltage (VDC)				
					12±2	15±2	20±3	24±4	28±4
005	± 5	+200	-205	±250	-212	-215	-220	-224	-228
012	±12	±104		±125					
015	±15	± 83		±100					
018	±18	± 69	-205	± 83	-212	-215	-220	-224	-228
INPUT CURRENT		Full Load	830		390	310	230	200	170
(mAmps)		No Load	180		100	80	90	60	45

INPUT:

Voltage (see selection chart)
Current: (see selection chart)

OUTPUT:

Voltage and Current: (see selection chart)
 Output voltage varies directly with the input voltage over specified range.

Voltage accuracy: maximum deviation from nominal output voltage specified in Figure 1.

Minimum Load: 300mW.

REGULATION:

Line Unregulated
 Load (½ to FL) See Fig. 2
 Load (300mW to FL) 2X (½ to FL) typ.

RIPPLE: (see fig. 3)

Frequency: 22 - 24 kHz typ.

POLARITY:

Single output units may be used as positive or negative supplies.
 Dual output units have common return.

ISOLATION:

Input to output 600 VDC
 Insulation
 Resistance 100 megohms min.

Specifications are subject to change without notice.

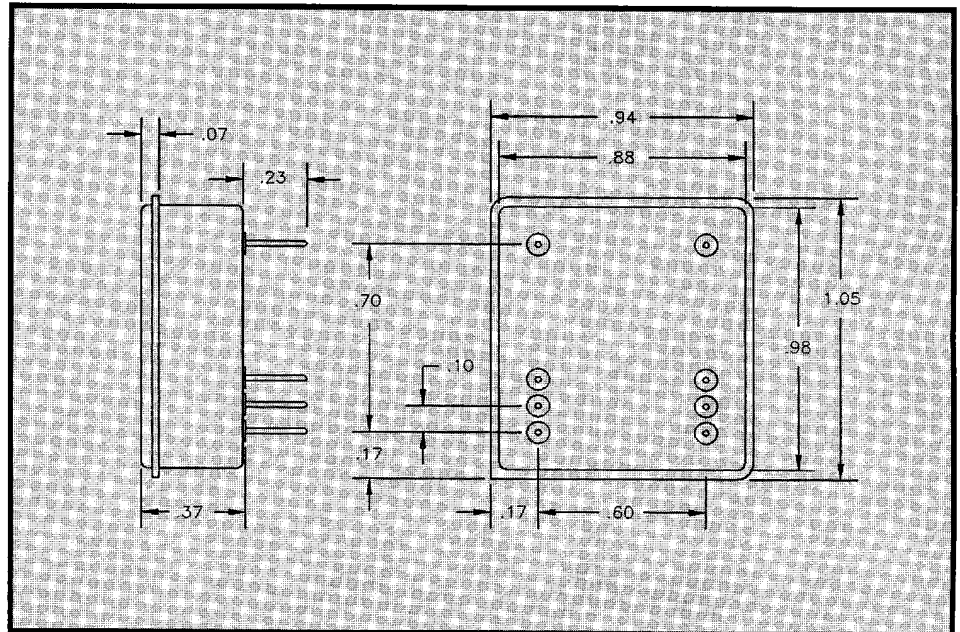
3 WATT DC/DC Power Supply

TECNETICS

Catalog HCHR Series

Mechanical

Dim: .94" x 1.05" x .38"
Cooling: Convection
Mounting: PC Mount
Terminals: P.C. type
Case: Nickel-plated copper
Encapsulation: Epoxy
Weight: 0.45 oz.



Environmental

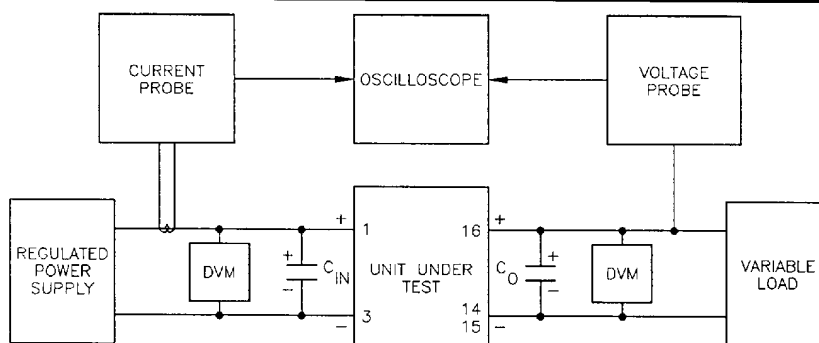
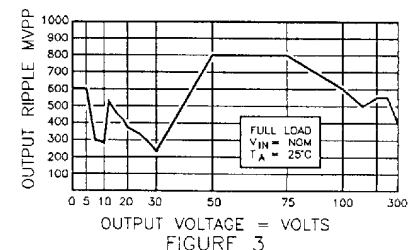
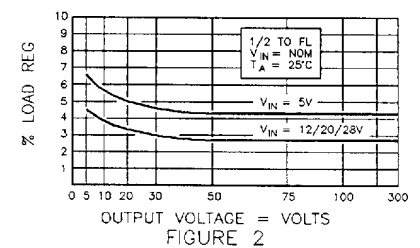
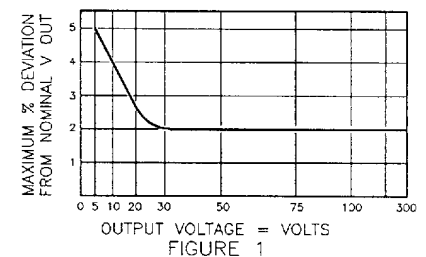
OPERATING TEMPERATURE:
-55°C to +100°C, baseplate

STORAGE TEMPERATURE:
-55°C to +125°C

CASE RISE:
40°C/watt dissipation (typ.)

Military

MIL-E-5400T
MIL-STD-454K, Notice 1
MIL-I-4528
MIL-STD-810D



TEST CONFIGURATION

C _{IN} = 47mF	35V	DASH	NOS.	105, 106
C _{IN} = 22mF	35V	DASH	NOS.	112, 115, 120, 124, 128
C _{IN} = 15mF	75V	DASH	NOS.	148
C _O = 47mF	35V	MODEL	NOS.	005 THRU 010
C _O = 22mF	35V	MODEL	NOS.	012 THRU 030
C _O = 0.25mF	400V	MODEL	NOS.	050 THRU 300

FOR DOUBLE OUTPUT UNITS (PIN 15 COM RET)
 C_{IN} SAME AS SINGLE OUTPUT UNITS
 C_O = 22mF, 35V (X2) ALL UNITS