

HIGH EFFICIENCY, LOW NOISE, DC/DC CONVERTERS

940 SERIES DC/DC CONVERTERS FEATURES

- Inaudible ($>20\text{kHz}$) converter switching frequency.
- Continuous, Six-Sided EMI/RFI shielding except on models 944 & 946.
- Free air convection cooling - no external heat sink or specification derating is required over operating temperature range.
- Output short circuit protection (either output to common) for at least 8 hrs. at $T_A = +71^\circ\text{C}$.
- Output current limiting at 150% of rated current.
- Automatic restart after short condition removed.
- Automatic starting with reverse current injected into outputs.

GENERAL SPECIFICATIONS FOR ALL MODELS

Line Regulation - full range: $\pm 0.05\%$ max
 Load Regulation - no load to full load: $\pm 0.05\%$ max
 Output Noise and Ripple: 1mV rms max
 Input Filter Type: π
 Operating Temperature Range: -25°C to $+71^\circ\text{C}$
 Storage Temperature Range: -40°C to $+150^\circ\text{C}$
 Mechanical Specification: see page 597.



DC/DC CONVERTERS

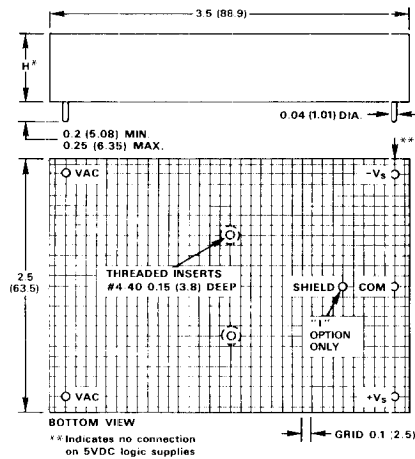
SPECIFICATIONS (typical @ $+25^\circ\text{C}$ over the full range of input voltages unless otherwise noted)

Model	Output Voltage	Output Current	Input Voltage	Input Voltage Range	Input Current Full Load	Output Voltage Error Max	Temperature Coefficient / $^\circ\text{C}$	Efficiency Full Load Min	Breakdown Voltage Continuous
940	$\pm 15\text{V}$	$\pm 150\text{mA}$	5V	4.65/5.5V	1.35A	$\pm 0.5\%$	± 0.01	62%	500V dc
941	$\pm 12\text{V}$	$\pm 150\text{mA}$	5V	4.65/5.5V	1.17A	$\pm 0.5\%$	± 0.01	58%	500V dc
942	5V	600mA	5V	4.65/5.5V	1.02A	$\pm 1\%$	± 0.02	55%	500V dc
943	5V	1000mA	5V	4.65/5.5V	1.52A	$\pm 1\%$	± 0.02	62%	500V dc
944	$\pm 15\text{V}$	$\pm 60\text{mA}$	5V	4.65/5.5V	0.67A	$\pm 0.5\%$	± 0.01	50%	8000V dc
945	$\pm 15\text{V}$	$\pm 150\text{mA}$	28V	23/31V	250mA	$\pm 0.5\%$	± 0.01	61%	500V dc
946	$\pm 15\text{V}$	$\pm 60\text{mA}$	28V	23/31V	120mA	$\pm 0.5\%$	± 0.01	48%	8000V dc

MECHANICAL OUTLINES

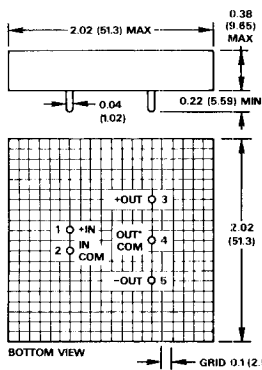
Dimensions shown in inches and (mm).

"P" CASE



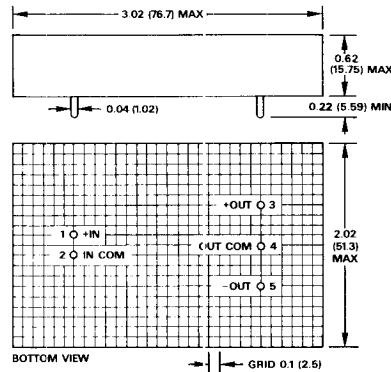
SOCKET AC1013
(SOCKET AC1028 FOR 1 OPTION)

"A" CASE



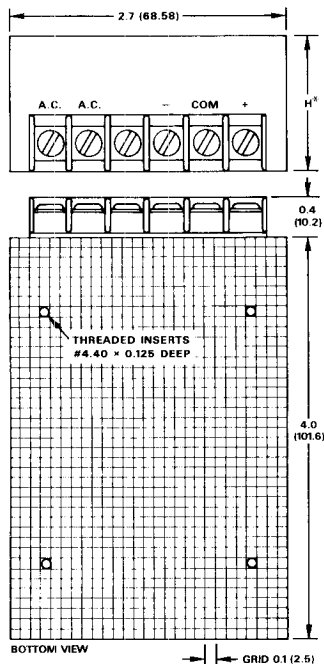
SOCKET AC1051

"B" CASE



SOCKET AC1052

CHASSIS MOUNT



*See Reference Guide.

REFERENCE GUIDE

Model	Output (V/mA)	Height (H)	Case	Weight (grams)
902	±15/100	1.25	P	530
902-2	±15/100	0.875	P	330
903	5/500	1.25	P	530
904	±15/50	0.875	P	330
905	5/1000	1.25	P	530
906	5/250	0.875	P	330
907	±12/25	0.875	P	330
908	±12/100	0.875	P	330
915	±15/25	0.875	P	330
920	±15/200	1.25	P	530
921	±12/240	1.25	P	530
922	5/2000	1.62	P	750
925	±15/350	1.62	P	750
934	±24/100	1.25	P	530
940	±15/150	0.375	A	85
941	±12/150	0.375	A	85
942	5/600	0.375	A	85
943	5/1000	0.375	A	85
944	±15/60	0.62	B	120
945	±15/150	0.375	A	85
946	±15/60	0.62	B	120
952	±15/100	1.44	CM	590
955	5/1000	1.44	CM	590
956	5/2000	2.00	CM	880
970	±15/200	1.44	CM	590
973	±15/350	2.00	CM	880
975	±15/500	2.00	CM	880

MODEL 950 POWER SUPPLY MANIFOLD

This manifold permits use of the 900 series "P" cased modules on the design bench. In combination with these supplies the 950 provides a safe, convenient, and inexpensive bench supply for breadboarding, testing, or general laboratory use.

