ECM MODEL TABLE

SPECIFICATION	OUTPUT VOLTAGE	OUTPUT CURRENT	CURRENT LIMIT	RIPPLE (SOURCE & SWITCHING)	NOISE (SPIKE)	EFFICIENCY
Units	Volts	Amps	Amps	mV	mV	Percent
Condition	Factory set, (1)	0-50°C	Setting at 25°C nom input	Nom input max load p-p max	d-c to 20MHz (1) p-p max	Nom input max load typ
16 WATT MODELS						
ECM 021K-CB						
Output #1	+5	0.5-2.0	2.2	120	2% of output voltage +50mV	67%
Output #2	+12	0.0-0.3	0.4	60		
Output #3	-12	0.0-0.2	0.3	60		
ECM 022K-CB						
Output #1	+5	0.5-2.0	2.2	120	2% of output voltage +50mV	67%
Output #2	+15	0.0-0.3	0.4	60		
Output #3	-15	0.0-0.2	0.3	60		

(1) Nominal input, maximum load, 25°C

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ECM GENERAL SPECIFICATIONS

SPECIFICATION		RATING/DESCRIPTION	CONDITION
Temperature		0-71°C; See Fig.1	Operating
		-40°C to 85°C	Storage
Humidity		95% RH	Non-condensing, operating & storage
Shock		20g peak, ½ sine pulse, 3 shocks each axis 11 ±5msec duration	Non-operating
Vibration		5-10Hz: 10mm amplitude 10-55Hz: 2g acceleration 1 hour each 3 axes	Non-operating
Isolation	Output to case	500V d-c, 100MΩ	25°C, 65% RH
Withstand voltage	Input to output	2KV a-c for 1 minute	25°C, 65% RH
	Input to case	2KV a-c for 1 minute	
Safety		UL 478 recognized; CSA 1402 certified	
Type of construction		PC card enclosed	
Enclosure		Steel	
Cooling		Convection	

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ECM INPUT CHARACTERISTICS

SPECIFICATION	RATING/DESCRIPTION	CONDITION
Voltage range	85-132V a-c, 110-170V d-c	
Brownout voltage	80V a-c/105V d-c	Low operating limit
Current	0.5A	At 120V a-c
	0.6A	At 85V a-c
Fuse value	Internal fuse, wire lead 125V, 2A	
Initial turn-on surge, first ½-cycle	20A max	120V a-c, rated load 25°C cold start
Frequency	47-440Hz	Single phase
EMI	Meets conducted noise standard of FCC 20780, Class B	
Leakage current	0.5mA max	At 25°C (UL method)
Startup time	50msec to reach 90% nom.	Std.(1)
Holdup time	20msec min	Std.(1)
Circuit type	Output #1: flyback Outputs #2 & #3: flyback plus linear post regulators	
Switching frequency	35~185KHz (depending on load)	

(1) Std. condition = nominal input, maximum load, 25°C

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ECM OUTPUT CHARACTERISTICS

SPECIFICATION		RATING/DESCRIPTION OUTPUT #1	RATING/DESCRIPTION OUTPUTS #2 & #3	CONDITION
Source Effect	typ	0.5%	0.5%	Minimum to maximum output
	max	1.5%	1.5%	
Load Effect	typ	1.0%	0.5%	10% to 100% load
	max	3.0%	1.5%	
Temperature Effect	typ	1.5%	1.0%	Nom. input, Nom. load, 0-50°C
	max	3.5%	3.0%	
Combined Effect (source, load, & temp.	typ	±2.0%	±1.5%	
	max	±4.0%	±4.0%	
Time Effect (drift)		0.5%		0.5-8.5hr, maximum load, 25°C
Recovery Characteristics	Excursion	<4.0%		Step load change from 50% to 100% of rated load. Nom. input 25°C
	Recovery within ±1%	<2msec		
Overvoltage Protection		—		

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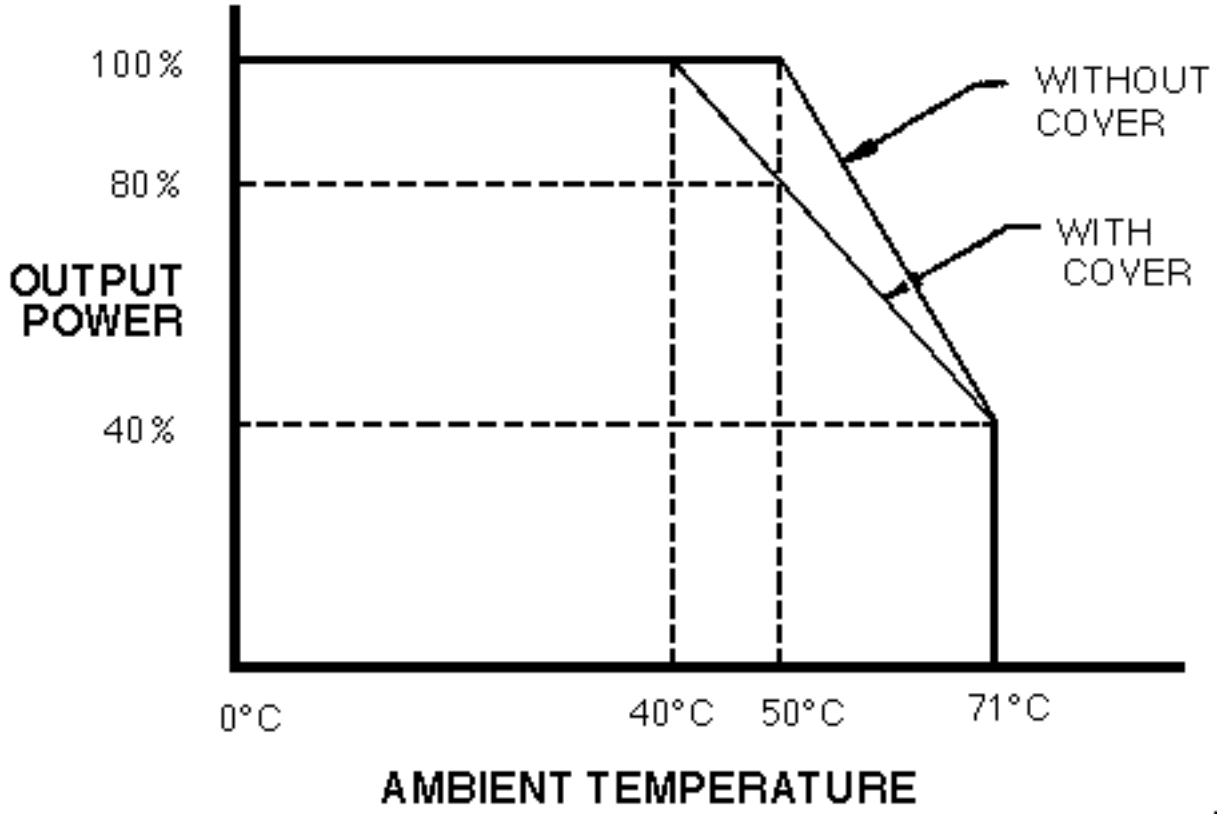
FIG. 1
OUTPUT POWER VS. AMBIENT TEMPERATURE

16 WATT MODELS ECM



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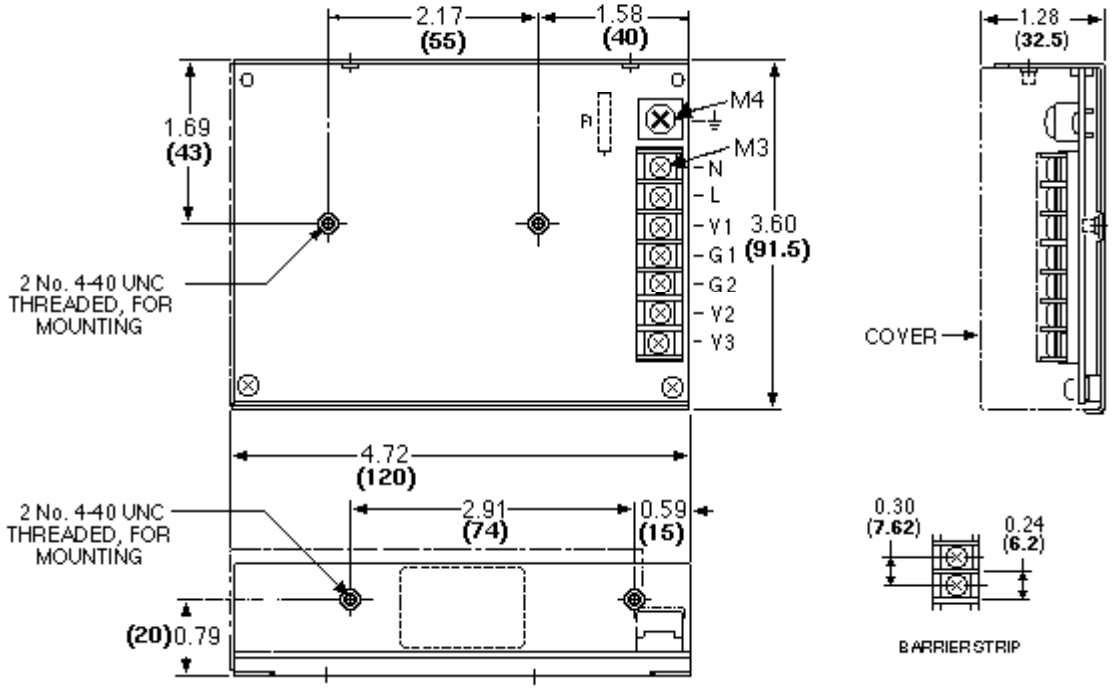
Dimensions in light face type are in inches, dimensions in bold face type are in millimeters.

Tolerance: ± 0.028" (0.7mm) between mounting holes; ± 0.04" (1.0mm) other dimensions

Mounting: 4-40 tapped holes -- (2) bottom, (2) each side; maximum screw penetration 0.24" (6mm).

16 WATT MODELS ECM



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