

ELECTRICAL SPECIFICATIONS*2 CB101 (10,000V)

PARAMETER	VALUE
INPUT VOLTAGE	+11.5 to +16 VDC
INPUT CURRENT	<100 mA, No Load
	<225 mA, Full Load
INPUT CAPACITANCE	440 uF low ESR
PROGRAMMING VOLTAGE	0 to +5VDC, <100uA
PROGRAMMING VOLTAGE OVERVOLTAGE	<5.25VDC
REFERENCE VOLTAGE	5VDC, 2mA
CURRENT MONITOR	0 to +5VDC (Load current 0 to 100%), Error <0.5% ⁶
VOLTAGE MONITOR	0 to +5VDC (Load voltage 0 to 100%), Error <0.5% ⁶
RESPONSE TIME	<250msec (Full Load, full scale response) (10–90%)
SETPOINT ACCURACY ⁷	Adjustable +/- 1% (using gain adjust)
LINEARITY ⁷	<1 % (20% to 100% Vout)
STABILITY	<0.01%/hr/8hrs
TEMPCO	<50 ppm/°C ³
THERMAL SHOCK LIMIT	1°C /10 seconds
OPERATING TEMPERATURE	-10 to +60°C ⁵ (CASE) (For wider range consult factory)
STORAGE TEMPERATURE	-20 to +100°C
THERMAL SHUTDOWN	> 85°C (CASE)

DETAILED PRODUCT DESCRIPTION

The CB Series is new line of miniature, well-regulated high voltage power supplies. The modules are programmed from 0 to 100% of rated output via a 0 to +5 volt DAC compatible high impedance programming input voltage. The CB Series features current and voltage monitoring, built-in protection against programming overvoltage, and thermal shutdown. Temperature drift is typically less than 50 PPM/°C. A built-in reference voltage source can be used in lieu of the programming voltage. The CB Series exhibits very low ripple, noise,

and EMI/RFI by utilizing a quasi-sinewave oscillator, shielded transformer, excellent filtering techniques, and an isolated steel enclosure featuring a separate grounding pin. An externally accessible potentiometer provides adjustable gain trim, allowing for individual calibration of units. A proprietary encapsulation process and high performance formula are used to achieve excellent high voltage and thermal properties. Positive and negative outputs are offered.

POWER DERATING CURVE

Output Voltage vs. Output Power Derating Curve

