



**Dynamic
Measurements
Corp.**

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HIGH VOLTAGE HIGH SPEED FET OPERATIONAL AMPLIFIERS MODELS 1810/1811

OPERATING SPECIFICATIONS (typical and nominal at +25°C, unless otherwise noted)

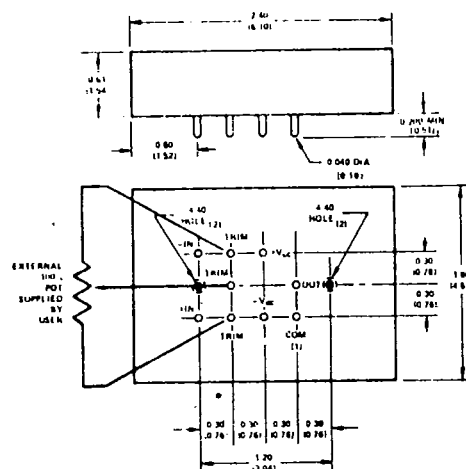
(Minimum warmup time 2 minutes)

	<u>Typ.</u>	<u>Max.</u>	<u>Min.</u>	<u>Units</u>
INPUT				
Differential Voltage (1) (2)		300		V
Common Mode Voltage (2)		±135		V
Common Mode Rejection Ratio			100	db
Common Mode Resistance			10 ¹²	Ω
Differential Input Resistance			10 ¹²	Ω
OUTPUT				
Voltage (V _{CC} -10)		±140		V
Current, Continuous			±20	mA
Capacitive Load for Stable Operation (3)	500			pF
GAIN AND FREQUENCY RESPONSE				
D.C. Gain at Rated Load	120		110	db
Gain Bandwidth Product	10		5	MHz
Stable Unity Gain Frequency	10		5	MHz
Full Power Response (4)			150	KHz
TRANSIENT RESPONSE				
Slew Rate (5)	250		100	V/μs
Settling Time to 0.1% (5)	1	5		μs
OFFSET AND NOISE				
Offset Voltage		Adj. to 0		
Vs. Temp. Range -25°C to +85°C		20 (1811)		μV/°C
		50 (1810)		μV/°C
Vs. Power Supply	±10			μV/%
Input Offset Current		±10		pA
Bias Current @ 25°C		-30		pA
Vs. Temp. Range -25°C to +85°C		Doubles every 10°C		

(OVER)

	<u>Typ.</u>	<u>Max.</u>	<u>Min.</u>	<u>Units</u>
NOISE (VOLTAGE)				
.01Hz to 10Hz, P-P	5			μ V
10Hz to 10KHz, RMS	3			μ V
POWER REQUIREMENTS				
Operating Voltage Range		± 150	± 60	V
Quiescent Current		± 10		mA
TEMPERATURE RANGE				
Operating, Full Ratings		+ 70	0	$^{\circ}$ C
Operating, 50% Derated		+ 85	- 25	$^{\circ}$ C
Storage (6)		+ 85	- 25	$^{\circ}$ C

- Notes: (1) Maximum Voltage for no damage.
 (2) Do not exceed $\pm V_{CC}$.
 (3) Amplifier bandwidth can be reduced to drive larger capacitive loads . . . consult factory.
 (4) Unity gain inverting 200 volts P-P.
 (5) Gain = 10, inverting ± 100 volt step.
 (6) Extended temperature ranges available. Please consult DMC.



Mating Socket
DMC Model 6510

VIEW TOWARD PINS
OUTLINE DIMENSIONS
(IN INCHES AND CENTIMETERS)
NOTES: (1) UNITS WITH LARGER RESPONSE ARE
AVAILABLE WITHOUT COMMON PIN -
CONSULT FACTORY
(2) RECOMMENDED FOR HEAT SYNC MOUNT
ING IN SOME APPLICATIONS - CONSULT
FACTORY