



		CHATSWORTH, CA.			
		SCALE	REV	DATE	ECN
ALL DIMENSIONS IN INCHES TOLERANCE: .XXX = ± .XX = ± .01		2X	-	-	-
SURFACE FINISH EXCEPT AS NOTED ✓		DATE	PART NO.		
BREAK EDGES TO DEBURR RADIUS OR CHAMFER		5/10/96			
EXCEPT AS OTHERWISE NOTED		DRAWN	CHECKED	MAT'L	
THESE DIAS  TO T.I.R.		N.C.	D.Z.		
FILLETS - MAX RAD.		APPROVED	NEXT ASSEMBLY		USED ON
ALL PART NUMBER LETTERSUFFIXES ARE TO BE INTERPRETED AS FOLLOWS: I.E. - 107-0000-01 (X)		TITLE			DWG NO.
M - MACHINED ONLY (UNPLATED)	G - MATERIAL HAS BEEN GRAINED	<b>OUTLINE/INSTALLATION DRAWING,          MODEL SERIES 4751B</b>			<b>127-4751B</b>
P - PLATED/PAINTED	S - MATERIAL HAS BEEN SAWCUT				
H - HEAT TREATED	E - ENVIRONMENTAL TEST				SHEET 1 OF 1

## SPECIFICATIONS SERIES 4751B

### IN-LINE MINIATURE CHARGE AMPLIFIERS

MODEL	RANGE FOR +/- 5 V OUT (+/- pC)	SENSITIVITY (mV/pC)	FEEDBACK CAPACITOR (pF, NOMINAL)
4751B1	100	50	20
4751B2	500	10	100
4751B3	5000	1	1000
4751B4	50,000	0.1	10,000

#### COMMON SPECIFICATIONS

SPECIFICATION	VALUE	UNITS
DISCHARGE TIME CONSTANT, NOM.	0.1	SECONDS
LOW FREQUENCY RESPONSE, -3db/-5%	1.6/4.8	Hz
OUTPUT BIAS VOLTAGE, +/- 2 V	10	VDC
OUTPUT IMPEDANCE, NOM.	100	OHMS
TEMPERATURE RANGE	-50 to +188	°F
THERMAL COEFFICIENT OF SENSITIVITY	.02	%/°F
SUPPLY CURRENT RANGE	2 to 20	mA
SUPPLY (COMPLIANCE) VOLTAGE RANGE	+18 to +30	VDC
SIZE, DIA x LENGTH	0.50 x 1.75	INCHES
WEIGHT	25	GRAMS
INPUT and SIG/PWR CONNECTORS	10-32	COAXIAL

**HIGH FREQUENCY RESPONSE** [1] (Depends upon various parameters such as cable length and output signal scope) Test results for Model 4751B3 (1 mV/pC sensitivity) are shown here:

FREQUENCY RESPONSE, +/- 5% (kHz)			
DRIVE CURRENT (mA)	CABLE LENGTH (Ft.)	OUTPUT AMPLITUDE (+/- 1 VOLT)	(+/- 5VOLTS)
2	10	200	45
	100	80	16
	1000	8	2
5	10	340	93
	100	126	38
	1000	22	5
10	10	660	163
	100	160	72
	1000	32	9
20	10	920	300
	100	350	100
	1000	63	15

[1] The results shown here are typical for Model 4751B3 which has a 1000 pF feedback capacitor. Because of the higher gain of Models 4751B1 and B2, and the higher value of feedback capacitor for Model 4751B4, the frequency response of these Models will be accordingly poorer than the results shown in the above chart.