



		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	
I.E. - 107-0000-01 (X)		N.C.	D.Z.		
THESE DIAS ⊕ TO T.I.R.		APPROVED	NEXT ASSEMBLY		USED ON
FILLETS - MAX RAD.		TITLE			DWG NO.
		OUTLINE/INSTALLATION DRAWING, MODEL SERIES 4751B			127-4751B
					SHEET 1 OF 1

ALL PART NUMBER LETTERSUFFIXES ARE TO BE INTERPRETED AS FOLLOWS:

M - MACHINED ONLY (UNPLATED)	G - MATERIAL HAS BEEN GRAINED
P - PLATED/PAINTED	S - MATERIAL HAS BEEN SAWCUT
H - HEAT TREATED	E - ENVIRONMENTAL TEST



SPECIFICATIONS SERIES 4751B

IN-LINE MINIATURE CHARGE AMPLIFIERS

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

COMMON SPECIFICATIONS

SPECIFICATION	VALUE	UNITS
DISCHARGE TIME CONSTANT	0.1 to 0.5	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	180	30
	100	65	16
	1000	18	2
5	10	400	100
	100	180	50
	1000	20	5
10	10	700	170
	100	300	70
	1000	40	10
20	10	1300	300
	100	600	150
	1000	100	20

[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.