



		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		10/16/01			
EXCEPT AS OTHERWISE NOTED		DRAWN	CHECKED	MAT'L	
THESE DIAS TO T.I.R.		N.C.	R.A.		
FILLETS - MAX RAD.		APPROVED	NEXT ASSEMBLY		USED ON
TITLE		OUTLINE/INSTALLATION DRAWING, MODEL SERIES 4751BT (TEDS COMPATIBLE)			DWG NO.
ALL PART NUMBER LETTERSUFFIXES ARE TO BE INTERPRETED AS FOLLOWS: I.E. - 107-0000-01 (X)					127-4751BT
M - MACHINED ONLY (UNPLATED) P - PLATED/PAINTED H - HEAT TREATED					SHEET 1 OF 1
G - MATERIAL HAS BEEN GRAINED S - MATERIAL HAS BEEN SAWCUT E - ENVIRONMENTAL TEST					

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SPECIFICATIONS SERIES 4751T

**IN-LINE MINIATURE CHARGE AMPLIFIERS
WITH TRANSDUCER ELECTRONICS DATA SHEET (TEDS) FUNCTION**

MODEL	RANGE FOR +/- 5 V OUT (+/- pC)	SENSITIVITY (mV/pC, +10%/-0)	MINIMAL SENSOR INSULATION RESISTANCE (ohms, Ω)	FEEDBACK CAPACITOR (pF, NOMINAL)
4751T1	100	50	1G	50
4751T2	500	10	200M	100
4751T3	5000	1	2M	1000
4751T4	50,000	0.1	1M	10,000

COMMON SPECIFICATIONS

SPECIFICATION	VALUE	UNITS
DISCHARGE TIME CONSTANT, NOM.	0.1	SECONDS
LOW FREQUENCY RESPONSE, -3db	1.6	Hz
LOW FREQUENCY RESPONSE -5%	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
TEDS COMPATIBLE		

HIGH FREQUENCY RESPONSE [1] (Depends upon various parameters such as cable length and output signal scope) Test results for Model 4751T3 (1 mV/pC sensitivity) are shown here:

FREQUENCY RESPONSE, ± 5% (kHz)			
DRIVE CURRENT (mA)	CABLE LENGTH (Ft.)	OUTPUT AMPLITUDE	
		(± 1 VOLT)	(± 5 VOLTS)
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 4751T3 which has a 1000 pF feedback capacitor. Because of the higher gain of Models 4751T1 and T2, and the higher value of feedback capacitor for Model 4751T4, the frequency response of these Models will be accordingly reduces compared to the results shown in the above chart.