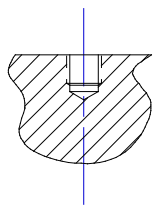


SYSTEM COMPONENTS MODEL 5310M1, 1 EA. :

- 3030C1**- CHARGE MODE ACCELEROMETER
- 6019B10** - LOW NOISE CABLE, 10-32 TO BNC WITH 6549 ENVIRONMENTAL SEALING BOOT
- 4705M13** - IN-LINE CHARGE AMPLIFIER

PORT PREPARATION:
 PREPARE FLAT SURFACE OVER Ø .500 AREA.
 AT CENTER DRILL #21(Ø .159) X .25 DEEP MIN
 BOTTOM TAP #10-32 UNC-2B X .150 DEEP MIN



DIYTRAN INSTRUMENTS, INC.		CHATSWORTH, CA.	
SCALE	1X	REV -	DATE -
DATE	7/1/99	PART NO.	MODEL 5310M1
DRAWN	N.C.	CHECKED	R.A.
APPROVED		NEXT ASSEMBLY	USED ON 5310M1
TITLE		DWG NO.	
OUTLINE/INSTALLATION DRAWING, SYSTEM MODEL 5310M1		127-5310M1	
		SHEET 1 OF 1	

EXCEPT AS OTHERWISE NOTED

ALL DIMENSIONS IN INCHES
 TOLERANCE: .XXX = ± .005 .XX = ± .01

SURFACE FINISH 63 ✓
 EXCEPT AS NOTED

BREAK EDGES TO DEBURR .003
 RADIUS OR CHAMFER

△ THESE DIAS ⊙ TO T.I.R.

FILLET - .005 MAX RAD.

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

I.E. - 107-0000-01 (X)



**PERFORMANCE SPECIFICATION
MODEL 5310M1 HIGH TEMPERATURE VIBRATION MEASUREMENT SYSTEM**

SPECIFICATION	VALUE	UNITS
PHYSICAL		
WEIGHT, accelerometer	6.8	grams
WEIGHT, charge amplifier	40	grams
MOUNTING PROVISION, integral stud	10-32	
CABLE LENGTH, from accel to charge amplifier	10	feet
CABLE TYPE	low noise coaxial	
CHARGE AMPLIFIER CONNECTOR	BNC JACK	
MATERIAL, ACCELEROMETER	316L CRES	
PERFORMANCE (SYSTEM)		
SENSITIVITY [1] $\pm 10\%$	10	mV/g
RANGE F.S. FOR ± 5 VOLTS OUTPUT	± 500	gpk
FREQUENCY RANGE, $\pm 5\%$	10 to 10,000	Hz
RESONANT FREQUENCY, NOM.	30	kHz
LINEARITY [2]	$\pm 2\%$	% F.S.
TRANSVERSE SENSITIVITY, MAX.	5	%
ENVIRONMENTAL		
MAXIMUM VIBRATION	600	g pk
MAXIMUM SHOCK	3000	g pk
TEMPERATURE RANGE (ACCELEROMETER)	-100 to +500	$^{\circ}$ F
	-73 to 260	$^{\circ}$ C
TEMPERATURE RANGE (CHARGE AMPLIFIER)	-50 to +185	$^{\circ}$ F
	-46 to 85	$^{\circ}$ C
SEAL, (ACCELEROMETER & CHG. AMP) HERMETIC	Ceramic-to-metal and laser welded	
COEFFICIENT OF THERMAL SENSITIVITY	.03	%/ $^{\circ}$ F
ELECTRICAL		
SUPPLY CURRENT [3]	2 to 20	mA
COMPLIANCE VOLTAGE RANGE	+14 to +30	Volts
OUTPUT IMPEDANCE, TYP.	100	Ω
BIAS VOLTAGE	8 to 12	VDC
DISCHARGE TIME CONSTANT	0.05 – 0.15	Sec
OUTPUT SIGNAL POLARITY	Positive	
For acceleration toward top		

[1] Measured at 100 Hz, 1 g rms per ISA RP 37.2.

[2] Measured using zero-based best straight line method, % of F.S. or any lesser range.

[3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.