

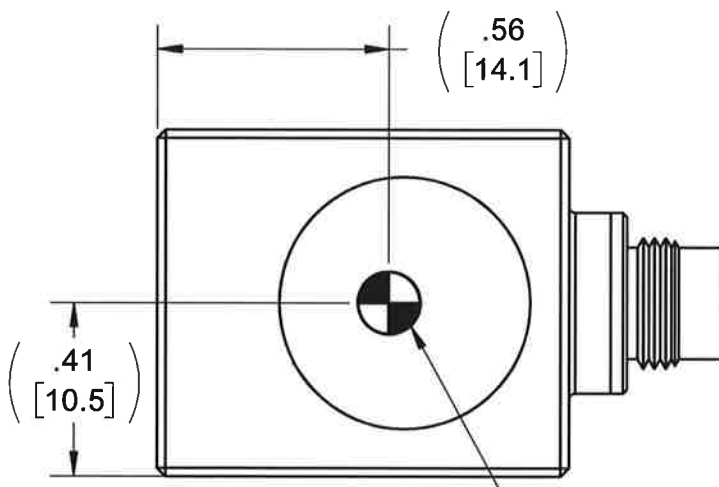
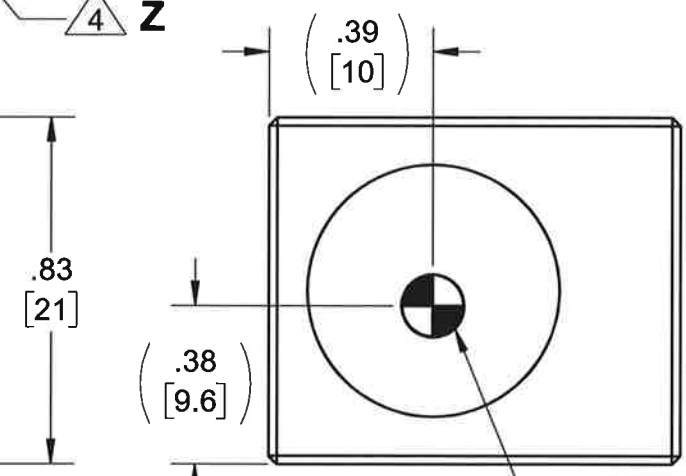
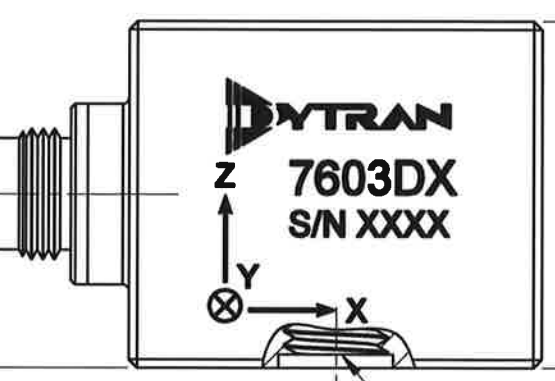
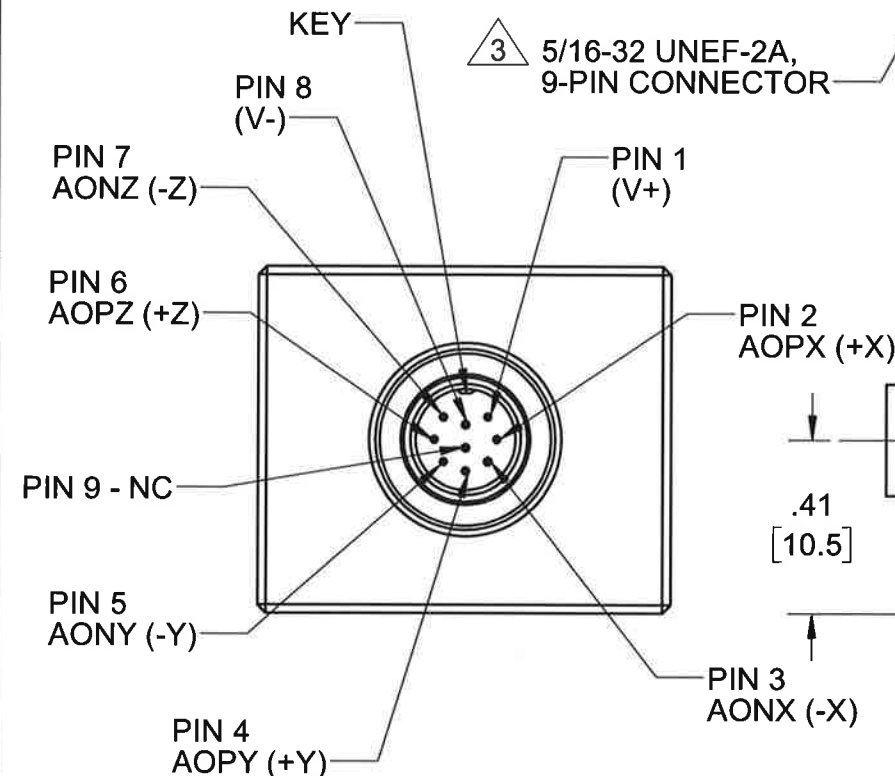
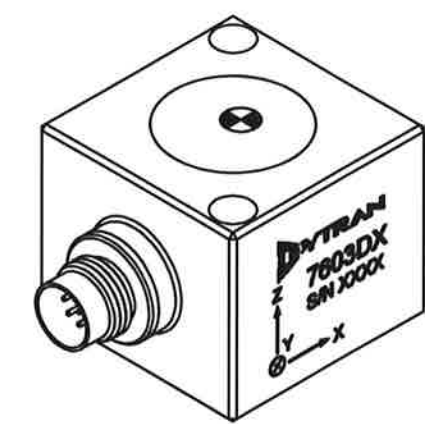
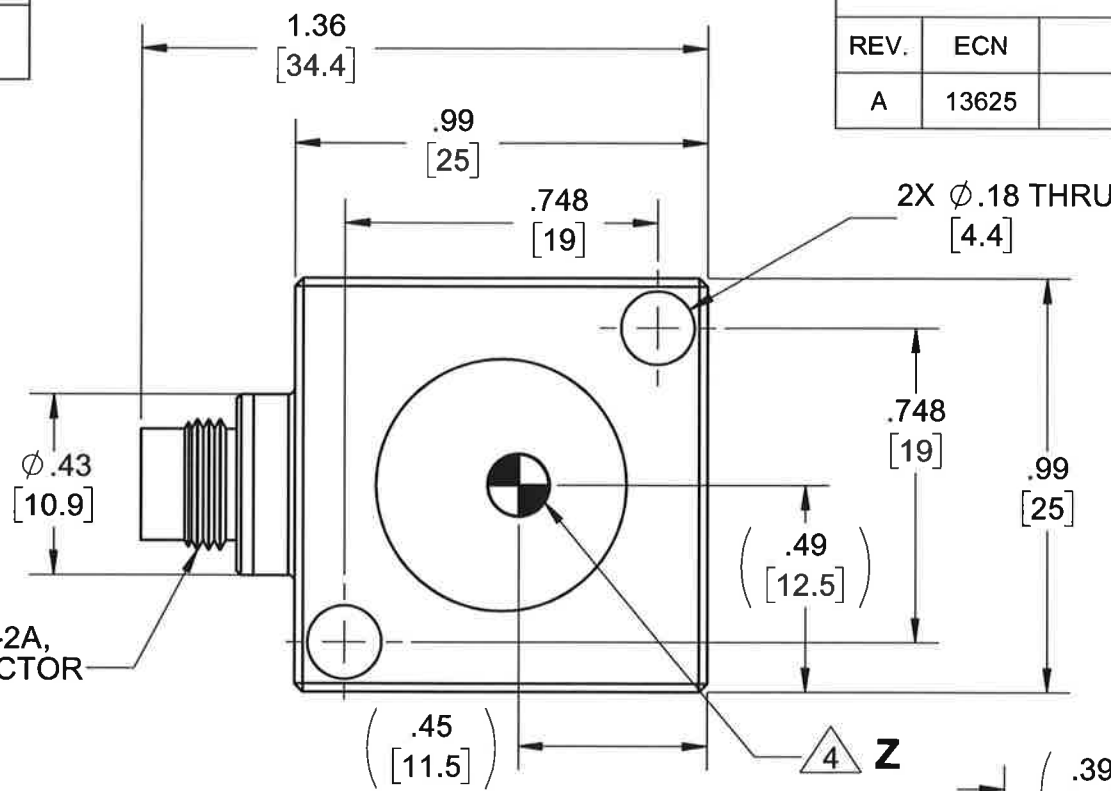
PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	13625	INITIAL RELEASE. REVISED PIN OUT.	NDC 08/03/17	WJ	AS

MODEL	INPUT RANGE
7603D1	±2g
7603D2	±5g
7603D3	±10g
7603D4	±25g
7603D5	±50g
7603D6	±100g
7603D7	±200g
7603D8	±400g



1/4-28 UNF-2B SEE SHEET 2 FOR MOUNTING PREPARATION

5. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION

4 MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS

3 MATES WITH DYTRAN 6964AXX CABLE (XX DENOTES LENGTH IN FT)

2. WEIGHT: 38 GRAMS, MAX.

1. MATERIAL: TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:  
 INTERPRET DIM & TOL PER ASME Y14.5M - 1994.  
 REMOVE BURRS.  
 COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.  
 CHAM EXT THDS 45° TO MINOR DIA.  
 THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.  
 DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES.  
 TOTAL RUNOUT WITHIN .005.  
 BREAK SHARP EDGES .005 TO .010.  
 MACHINED FILLET RADII .005 TO .015.  
 WELDING SYMBOLS PER AWS A2.4.  
 ABBREVIATIONS PER MIL-STD-12.

DECIMALS		METRIC		ANGLES
.XX ±.03	.X ±0.8			±1°
.XXX ±.010	.XX ±0.25			

APPROVALS		DATE
ORIG	NDC	08/03/17
CHK	WJ	8/16/17
APP	AS	8/16/17

DO NOT SCALE DRAWING

**MASTER COPY ONLY IF IN RED**

**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA

TITLE: **OUTLINE/INSTALLATION DWG, TRIAXIAL DC ACCELEROMETER, 7603D SERIES**

SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-7603D</b>	REV <b>A</b>
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SCALE: 1:1 SHEET 1 OF 2

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D

D

C

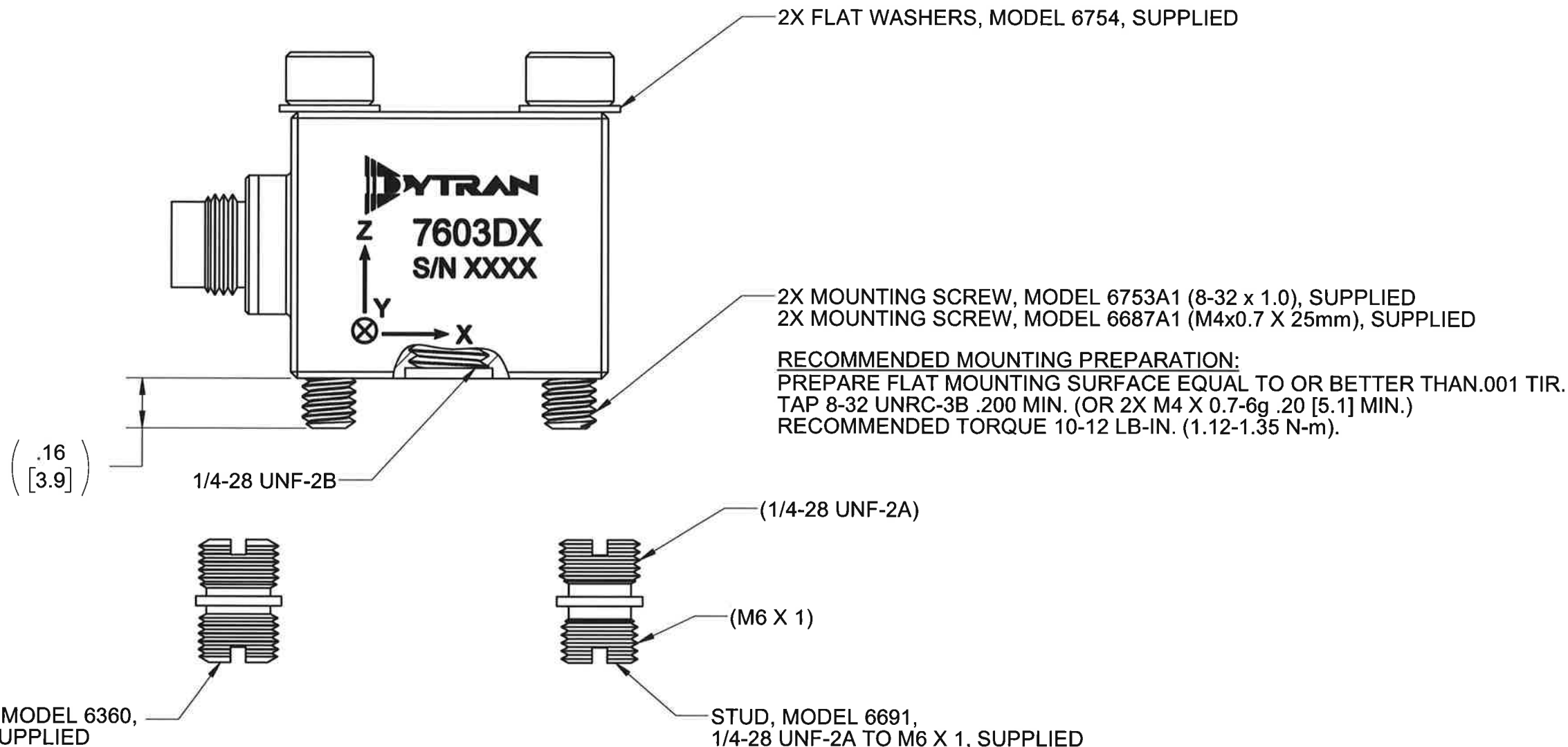
C

B

B

A

A



**RECOMMENDED MOUNTING PREPARATION: MODEL 6366**  
PREPARE MOUNTING SURFACE,  $\phi 1.25$  [31.2] MIN, FLAT TO .001 TIR.  
TAP 1/4-28 UNF-2B  $\nabla .200$  [5.1] MIN. TORQUE TO 12-15 Lb-in.

**RECOMMENDED MOUNTING PREPARATION: MODEL 6691**  
PREPARE MOUNTING SURFACE,  $\phi 1.25$  [31.2] MIN, FLAT TO .001 TIR.  
TAP M6 X 1  $\nabla .200$  [5.1] MIN. TORQUE TO 12-15 Lb-in.

<b>MASTER COPY</b> <small>Chatsworth, CA</small>			
<b>TITLE:</b> OUTLINE/INSTALLATION DWG, TRIAXIAL DC ACCELEROMETER, 7603D SERIES			
SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-7603D</b>	REV <b>A</b>
SCALE: 2:1		SHEET 2 OF 2	

<b>Model Number</b> 7603D4	<b>PERFORMANCE SPECIFICATION</b>	<b>DOC NO</b> PS7603D4
	<b>TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER</b>	REV C, ECN 13976, 01/19/18



- VARIABLE CAPACITANCE TECHNOLOGY
- DIFFERENTIAL MODE
- HERMETICALLY SEALED
- DC RESPONSE

**This family also includes:**

Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms)	Noise Differential (µg/√Hz)
7603D1	±2	0-300	250	2000	7
7603D2	±5	0-400	100	2000	12
7603D3	±10	0-600	50	5000	18
7603D5	±50	0-1200	10	5000	50
7603D6	±100	0-1400	5	5000	100
7603D7	±200	0-1750	2.5	5000	200
7603D8	±400	0-2000	1.25	5000	400

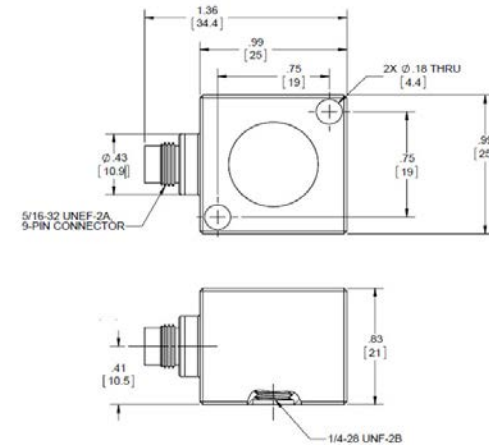
Refer to the performance specifications of the products in this family for detailed description.

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1
- 3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1
- 4) Mounting screws, Model 69034A16, 8-32 x 1.0, Qty. 2
- 5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2
- 6) Flat washers, Model 6754, Qty. 2

**Notes:**

- [1] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)
- [2] -90% to +90% of Full Scale.
- [3] Over the rated temperature range.
- [4] Bias voltage equal to (+v - (-v)) / 2
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches. Refer to 127-7603D for more information.

	ENGLISH		SI	
<b>PHYSICAL</b>				
Weight, Max	1.3	oz	38	grams
Connector	9-pin, 5/16-32 UNEF-2A	Type	9-pin, 5/16-32 UNEF-2A	
Material	Titanium Alloy		Titanium Alloy	
Sensing Technology	MEMS		MEMS	
<b>PERFORMANCE</b>				
Input Range	±25	g	±245.3	m/s <sup>2</sup>
Frequency Response (3dB), Nom	0 - 900	Hz	0 - 900	Hz
Resonant Frequency	>3000	HZ	>3000	Hz
Sensitivity Differential, ±5% [1]	20	mV/g	2	mV/m/s <sup>2</sup>
Output Noise, Differential, Typ	25	µg rms/√ Hz	245	µ m/s <sup>2</sup> /√ Hz
Non-Linearity, Max [2]	0.5	% F.S	0.5	% F.S
Cross Axis Sensitivity, Max	3	%	3	%
<b>ENVIRONMENTAL</b>				
Maximum Mechanical Shock (0.1 ms)	±5000	gpk	±49050	m/s <sup>2</sup> peak
Bias Temperature Shift, Max [3]	111	(ppm of span)/°F	200	(ppm of span)/°C
Bias Calibration Error, Max	0.5	% of span	0.5	% of span
Operating Temperature Range	-40 to +257	°F	-40 to +125	°C
Seal	Hermetic		Hermetic	
<b>ELECTRICAL</b>				
Output Common Mode Voltage, ± VDC	[ 4 ]		[ 4 ]	
Output Impedance, Nom	1225	Ω	1225	Ω
Operating Voltage	±3 to ±11	VDC	±3 to ±11	VDC
Operating Current (AOP & AON open), Max	35	mA Dc	35	mA Dc
Power Supply Rejection Ratio	>65	dB	>65	dB

