

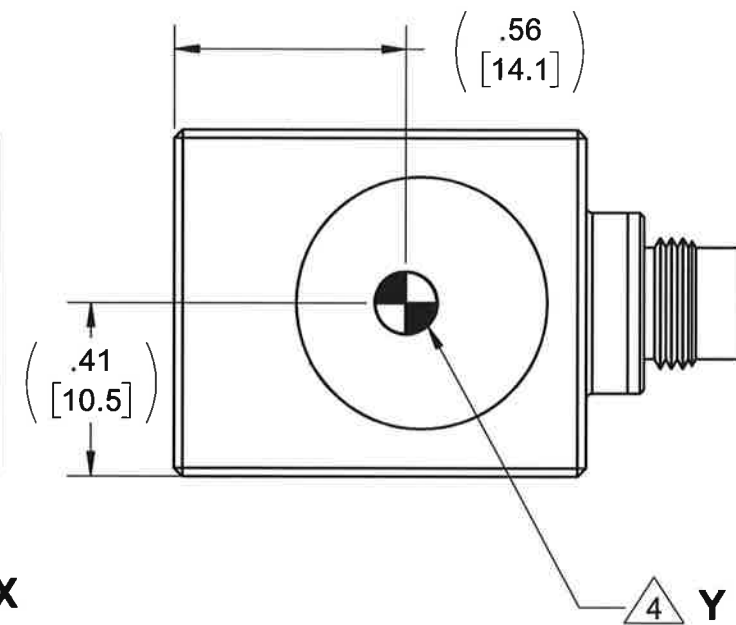
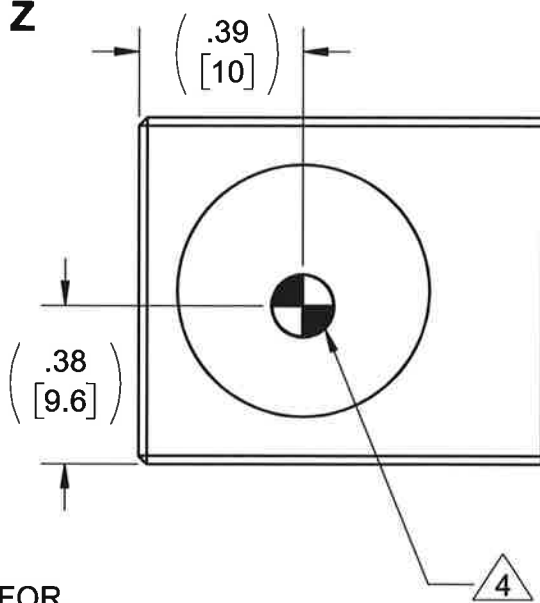
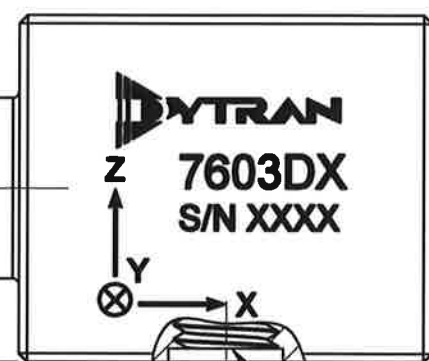
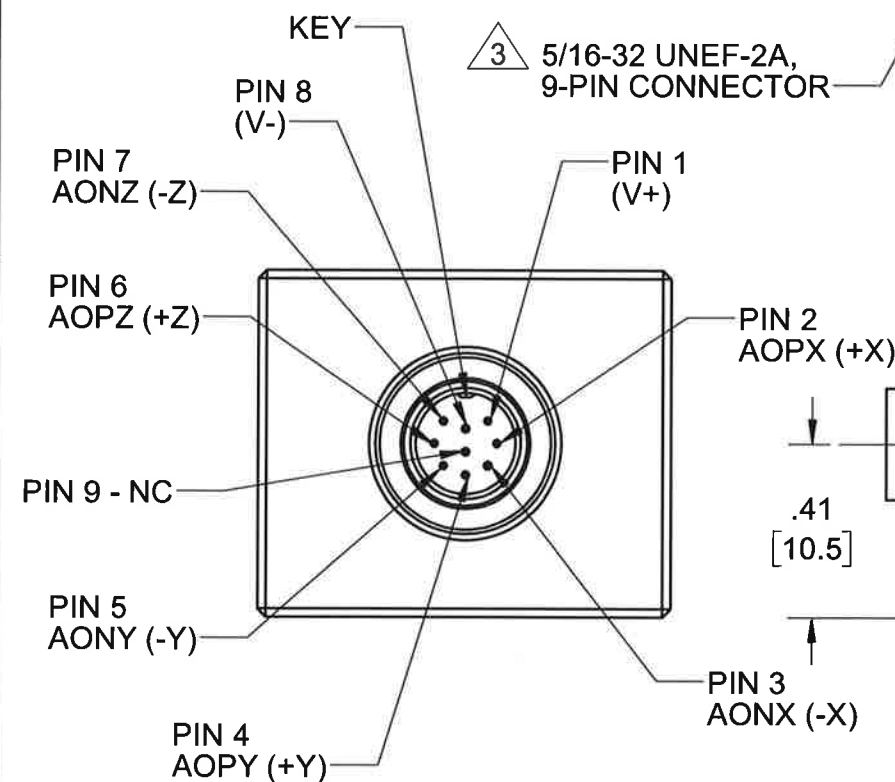
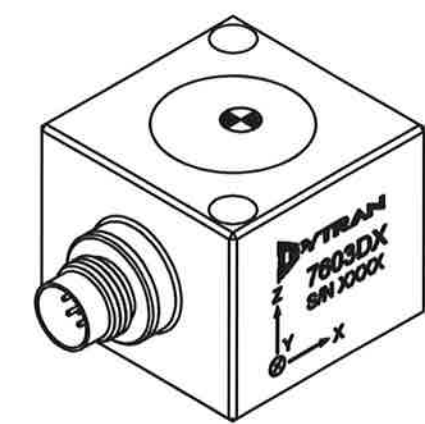
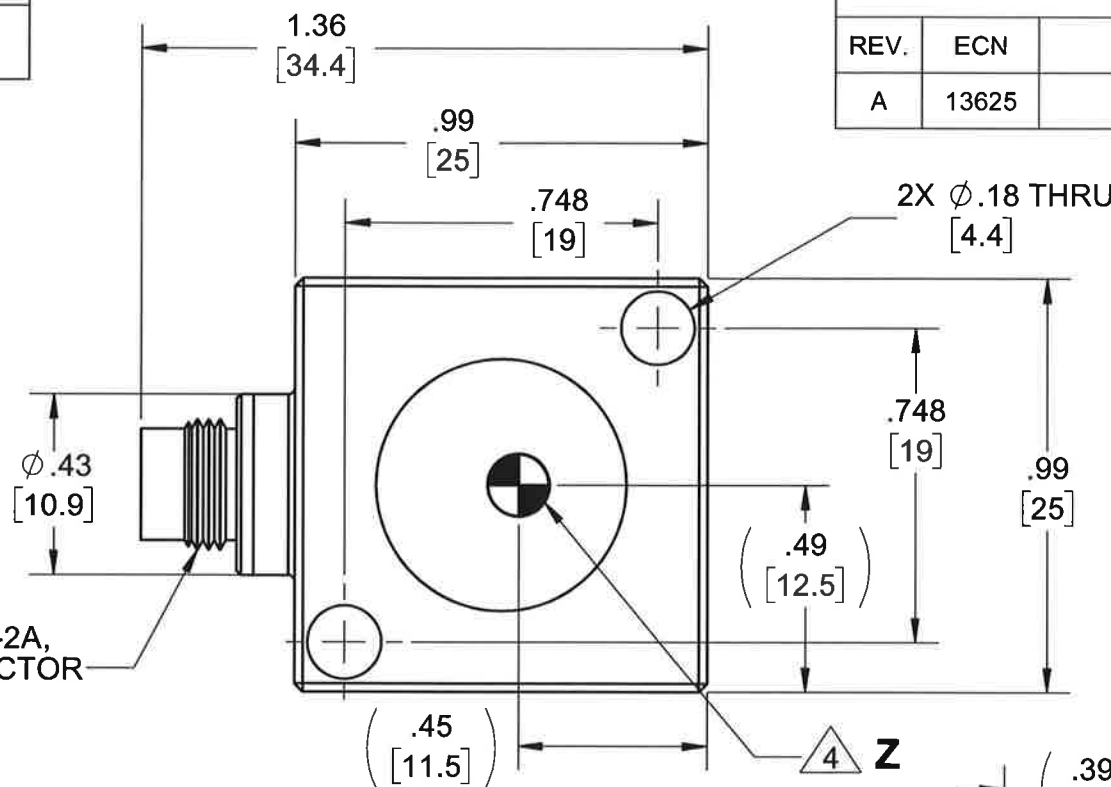
PROPRIETARY AND CONFIDENTIAL

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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.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:	
DECIMALS .XX ±.03 .XXX ±.010	METRIC X ± 0.8 .XX ± 0.25	ANGLES ±1°	
APPROVALS		DATE	
ORIG	NDC	08/03/17	
CHK	WJ	8/16/17	
APP	AS	8/16/17	
DO NOT SCALE DRAWING		THIRD ANGLE PROJECTION	

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

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

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-7603D	A

SCALE: 1:1 SHEET 1 OF 2

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D

D

C

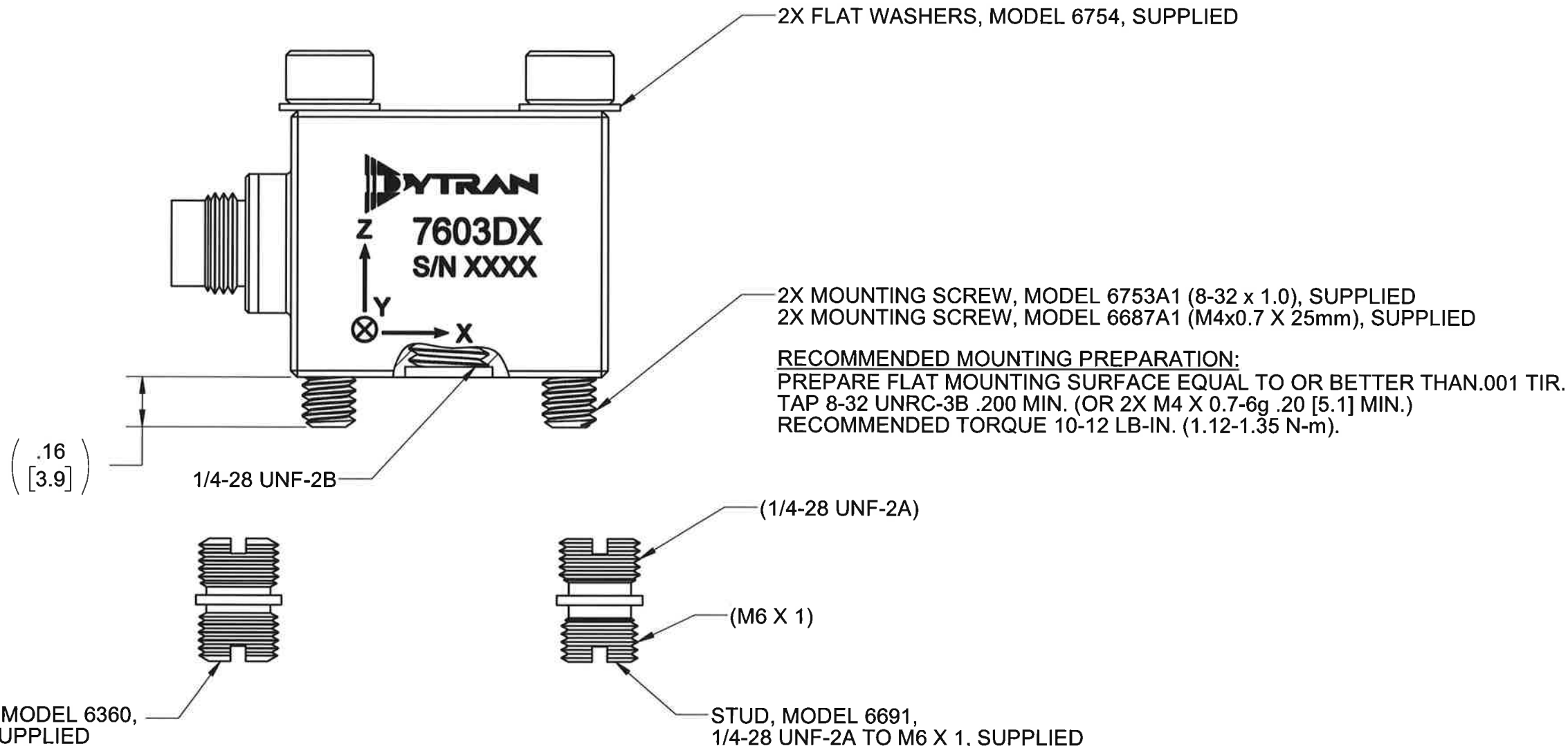
C

B

B

A

A



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

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

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

Model Number 7603D4	PERFORMANCE SPECIFICATION	DOC NO PS7603D4
	TRIAxIAL VARIABLE CAPACITANCE ACCELEROMETER	REV E, ECN 14848, 02/05/19



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

This family also includes:

Model	Input Range (g)	Frequency Response, $\pm 3\text{dB}$ (Hz)	Sensitivity Differential, $\pm 5\%$ (mV/g)	Max.Shock (0.1ms)	Noise Differential ($\mu\text{g}/\sqrt{\text{Hz}}$)
7603D1	± 2	0-400	250	2000	7
7603D2	± 5	0-500	100	2000	12
7603D3	± 10	0-1000	50	5000	18
7603D5	± 50	0-2000	10	5000	50
7603D6	± 100	0-2500	5	5000	100
7603D7	± 200	0-3000	2.5	5000	200
7603D8	± 400	0-4000	1.25	5000	400

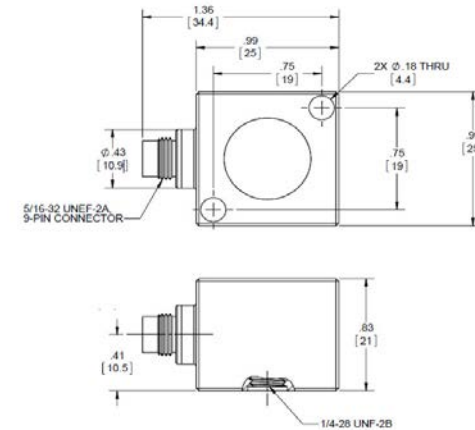
Refer to the performance specifications of the products in this family for detailed description.

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.
- [6] +6.0 to +22.0 VDC in single supply operation with V- grounded.



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

PHYSICAL

Weight, Max
Connector Type
Material
Sensing Technology

ENGLISH		SI	
1.3	oz	38	grams
9-pin, 5/16-32 UNEF-2A		9-pin, 5/16-32 UNEF-2A	
Titanium Alloy		Titanium Alloy	
MEMS		MEMS	

PERFORMANCE

Input Range
Frequency Response ($\pm 5\%$)
Frequency Response ($\pm 3\text{dB}$)
Resonant Frequency
Sensitivity Differential, $\pm 5\%$ [1]
Output Noise, Differential, Typ
Non-Linearity, Max [2]
Cross Axis Sensitivity, Max

± 25	g	± 245.3	m/s^2
0 - 500	Hz	0 - 500	Hz
0 - 1400	Hz	0 - 1400	Hz
>3000	Hz	>3000	Hz
20	mV/g	2	mV/m/s^2
25	$\mu\text{g rms}/\sqrt{\text{Hz}}$	245	$\mu\text{m/s}^2/\sqrt{\text{Hz}}$
0.5	% F.S	0.5	% F.S
3	%	3	%

ENVIRONMENTAL

Maximum Mechanical Shock (0.1 ms)
Bias Temperature Shift, Max [3]
Bias Calibration Error, Max
Operating Temperature Range
Seal

± 5000	gpk	± 49050	m/s^2 peak
111	(ppm of span)/ $^{\circ}\text{F}$	200	(ppm of span)/ $^{\circ}\text{C}$
0.5	% of span	0.5	% of span
-67 to +257	$^{\circ}\text{F}$	-55 to +125	$^{\circ}\text{C}$
Hermetic		Hermetic	

ELECTRICAL

Output Common Mode Voltage, \pm VDC
Output Impedance, Nom
Operating Voltage [6]
Operating Current (AOP & AON open), Max
Power Supply Rejection Ratio

[4]		[4]	
1225	Ω	1225	Ω
± 3 to ± 11	VDC	± 3 to ± 11	VDC
35	mA Dc	35	mA Dc
>65	dB	>65	dB

