



CRY3284

1/2" Pressure-field External-polarized High- sensitivity Microphone

Features

- **Key Specifications**

Sensitivity	50 mV/Pa
Dynamic Range	16 dBA to 146 dB
Frequency Range	3.15 Hz to 10 kHz ± 2 dB

- **Applications**

Anechoic chamber test
Electroacoustic test
Noise test

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

Introduction

CRY3284 is a 1/2" pressure-field externally polarized measurement microphone designed for use with a coupler for related electroacoustic testing.

The unique design of CRY3284 enables it to conduct testing on various electroacoustic devices, such as speakers and headphones. Additionally, it finds extensive applications in the fields of acoustic design research and audio equipment calibration.

Highlights

- **Use of High-sensitivity Pressure-field Microphones**

High-sensitivity microphones have a broad measurement frequency range and are applicable to a variety of measurement scenarios.

Pressure-field microphones are specifically designed for measurements in small enclosed cavities or near the sound source ports, and are widely used in fields such as acoustic research and electroacoustic testing.

- **Calibration**

Each CRY SOUND microphone is calibrated at the factory using traceable calibration equipment. Calibration certificates are provided with each unit. CRY SOUND recommends recalibration at least once a year.

- **Quality & Warranty**

All CRY SOUND microphone capsules use 3rd generation titanium diaphragms and protection grids and synthetic sapphire insulators - resulting in the most rugged and reliable measurement microphones on the market. Titanium provides superior corrosion resistance, high temperature stability, impact resistance and strength-to-mass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality.

CRY SOUND microphones are supported by a 10-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Field Type	Pressure-field
Sensitivity(± 1.5 dB)	50 mV/Pa, -26 dB re 1V/Pa
Frequency Response	3.15 Hz to 10 kHz ± 2 dB
Polarization Voltage	200 V
Capacitance	17 pF (@250 Hz)
Dynamic Range(re.20uPa)	16 dBA to 146 dB
Operating Temperature	-30°C to +80°C (-4°F to +140°F)
Temperature Stability	0.012 dB/°C (-10°C to +50°C) 0.007 dB/°F (+14°F to +122°F)
Static Pressure Stability	-0.01 dB/kPa
Operating Humidity Range	0 to 90%RH no condensation
Humidity Stability	< 0.1 dB (0 to 90%RH no condensation)
Pressure Equalization Vent	Rear vented
IEC 61094-4 Type	WS2P

Dimensions

Height with Grid	16.2 mm (0.64")
Diameter with Grid	13.2 mm (0.52")

Ordering Information

Optional Accessories

Electrostatic Actuator	TA0302 1/2" IEPE Electrostatic Actuator
Power Supply	CRY575 Three-channel Microphone Power Supply
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer

Drawings(mm)[inch]

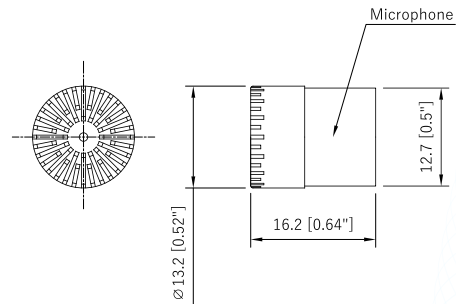


Fig.1 CRY3284 Microphone Drawings

Frequency Response

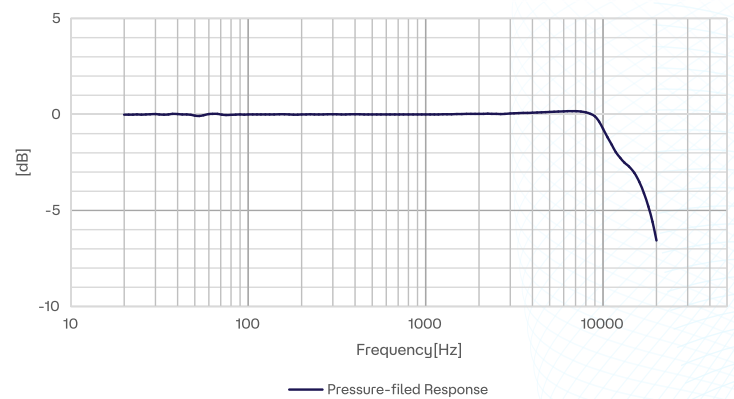


Fig.2 CRY3284 Microphone Typical Frequency Response

Related Products

CRY3281	1/2" free-field ex-polarized high-frequency microphone, 12.5 mV/Pa, 3.15 Hz-40 kHz, 23 dBA-160 dB
CRY3282	1/2" pressure-field ex-polarized wide-frequency microphone, 12.5 mV/Pa, 3.15 Hz-20kHz, 23 dBA-160 dB
CRY3285	1/2" free-field ex-polarized high-sensitivity microphone, 50 mV/Pa, 3.15 Hz-20kHz, 16 dBA-146 dB
CRY3482	1/4" pressure-field ex-polarized ultra-high frequency microphone, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-170 dB
CRY3485	1/4" free-field ex-polarized high-frequency microphone, 4 mV/Pa, 4 Hz-90kHz, 35dBA-165dB