



CRY3482

1/4" Pressure-field Ext-Polarized High Frequency Microphone

Features

Key Specifications

Sensitivity
Dynamic Range
Frequency Range

1.6 mV/Pa 45 dBA to 170 dB 4 Hz to 70 kHz ±2 dB

Applications

High-frequency (ultrasonic) measurements High-definition speakers, headphones, and earbud measurements High Sound Pressure Level (SPL) measurements

Standards

IEC 61094 4:1995 Measurement microphones - Part 4

Introduction

CRY3482 is a 1/4" pressure-field externally polarized measurement microphone designed for high-frequency and high-dynamic-range acoustic measurements.

The unique design of CRY3482 provides a flat frequency response, allowing for measurement frequencies up to 70 kHz. It is also capable of withstanding sound pressure levels of up to 170 dB. This makes it an excellent general-purpose measurement microphone for high-definition audio measurements and other ultrasonic acoustic applications.

Highlights

• Use of High frequency Pressure-field Microphones

High frequency microphones can accurately capture high-frequency sounds and are highly suitable for ultrasonic detection, high-frequency acoustic research, and other similar applications.

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

Quality & Warranty

All CRYSOUND 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-tomass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality.

CRYSOUND 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(±3 dB) | 1.6 mV/Pa, -56 dB re 1V/Pa |
| Frequency Response | 4 Hz to 70 kHz ±2 dB |
| Polarization Voltage | 200 V |
| Capacitance | 7 pF (@250 Hz) |
| Dynamic Range(re.20uPa) | 45 dBA to 170 dB |
| Operating Temperature | -30°C to +80°C(-22°F to +176°F) |
| Temperature Stability | 0.01 dB/°C (-10°C to +50°C) 0.006 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 | Side vented |
| IEC 61094-4 Type | WS3P |

Dimensions

| Height with Grid | 10.5 mm (0.413") |
|--------------------|------------------|
| Diameter with Grid | 7 mm (0.276") |

Drawings(mm)[inch]

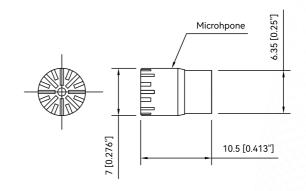
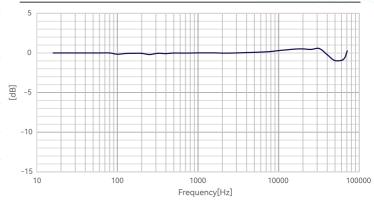


Fig.1 CRY3482 Microphone Set Drawings

Frequency Response



—— Pressure-filed Response
Fig.2 CRY3482 Microphone Typical Frequency Response

Ordering Information

| Optional Accessories | | |
|--------------------------|-------------------------------------------------|--|
| Power Supply | CRY575 Three-channel Microphone Power Supply | |
| Electroacoustic Analyzer | CRY6151B Electroacoustic Analyzer | |

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 |
|---------|--------------------------------------------------------------------------------------------------------------|
| CRY3284 | 1/2" pressure-field ex-polarized high- sensitivity microphone, 50 mV/Pa, 3.15 Hz-10 kHz, 16 dBA-146 dB |
| CRY3285 | 1/2" free-field ex-polarized high- sensitivity microphone, 50 mV/Pa, 3.15 Hz-20kHz, 16 dBA-146 dB |
| CRY3485 | 1/4" free-field ex-polarized high- frequency microphone, 4 mV/Pa, 4 Hz-90kHz, 35dBA-165dB |

Measure Sound Better