

# GRAS RA0402



100 Hz - 10 kHz IEC 60318-4  
10 kHz - 20 kHz ± 2.2 dB  
@ 13.5 kHz  
1260 mm<sup>3</sup> @ 500 Hz IEC 60318-4  
12.5 mV/Pa  
ITU-T Rec P.57

GRAS RA0402

20 kHz

40AO 1/2"  
[GRAS RA0401.](#)



GRAS RA0402 60318-4

10 kHz	10 kHz	13.5 kHz
Q		10 kHz

GRAS 13.5 kHz  
20 kHz

IEC60318-4 IEC60318-4 10 kHz 20 kHz ± 2.2 dB THD ITU-T P.57

[GRAS RA0401](#)



- IEC60318-4
- 10 20 kHz ± 2.2 dB
- 13.5 kHz 14 dB



- 10 kHz -- 10 kHz /
- 10 kHz 10 kHz
- 3-5 kHz

- IEC 60318-4
- ITU-T P.57 (08/96) P



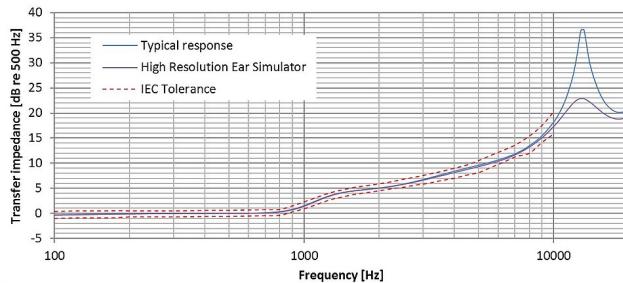
RA0402

[GRAS 40AO 1/2"](#)

13.5 kHz	Q	14 dB
20 kHz		

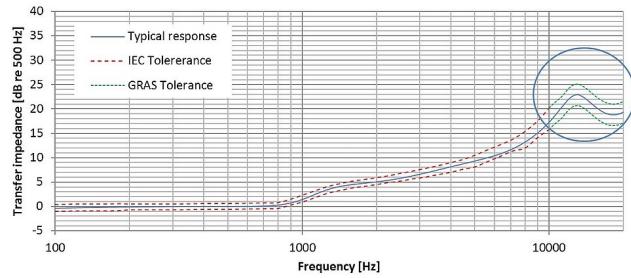
60318-4 RA0402

RA0045 RA0402  
RA0045 60318-4 1



## 1. 60318-4

IEC GRAS 10 20 kHz 2



## 2. IEC GRAS RA0402

36 dB RA0402 14 dB  
RA0402 RA0402

RA0402

GRAS KEMAR

## KEMAR

RA0045 KEMAR

- 
- 
-

•

## GRAS 43 ՀԱՅԱՍՏԱՆԻ

RA0402      RA0045 43AC 43EA  
43AG

[GRAS 43AC](#), [GRAS 43AE](#), [GRAS 43AG](#)

ՀԱՅԱՍՏԱՆԻ

ITU-T P.57 GRAS

- [GRAS RA0056](#)
- [GRAS RA0057](#)

IEC 60318-4

GRAS

ՀՀՀ

10 kHz

60318-4 10 kHz                          IEC                          --

60318-4 60711

ՀԱՅԱՍՏԱՆԻ ՀԱՅԱՍՏԱՆԻ

60318-4                          13.5 kHz

10 kHz

¼ "                          RA0402                          10 kHz    10 kHz

RA0402

RA0402 KEMAR

RA0402

RA0402 45CA /

ՀՀՀ

RA0402 CCP                          [GRAS 26CA](#)                          [GRAS 26CB](#)  
1/4"                          1/4 "                          RA0003                          RA0001

RA0045 RA0402

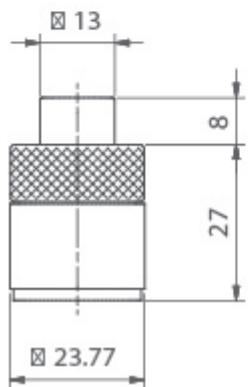
# Specifications

**GRAS RA0402**

Page: 4

Polarization/Connection		0 V / CCP
Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	25
Theoretical dynamic range upper limit with GRAS preamplifier @ +28 V / ±14 V power supply	dB	153
Theoretical dynamic range upper limit with GRAS preamplifier @ +120 V / ±60 V power supply	dB	164
Set sensitivity @ 250 Hz (±3 dB)	dB re 1V/Pa	-38
Resonance frequency	kHz	13.5
Coupler volume	mm <sup>3</sup>	1260 @ 500 Hz
Temperature range, operation	°C / °F	-30 to 60 / -22 to 140
Temperature coefficient @250 Hz	dB/°C / dB/°F	0.05
Humidity range non condensing	% RH	0 to 90
ANSI standard		S3.7
IEC standard		60318-4 (former 60711)
ITU-T recommendations		P.57
CE/RoHS compliant/WEEE registered		Yes/Yes, Yes
Weight	g / oz	52 / 1.8

Dimensions in mm





<a href="#"><u>GRAS RA0088</u></a>		
GRAS GR0433		
GRAS GR0434		
GRAS GR0436		
GRAS GR0437		
GRAS GR0438		
GRAS GR0440		
<a href="#"><u>GRAS RA0056</u></a>		
<a href="#"><u>GRAS RA0057</u></a>		
<a href="#"><u>GRAS 26CA</u></a>	26CA 1/2 CCP	BNC
<a href="#"><u>GRAS 26CB</u></a>	26CB 1/4 CCP	Microdot
GRAS RA0001	1/2	1/4
GRAS RA0003	1/2	1/4

GRAS Sound & Vibration

# GRAS Worldwide

Subsidiaries and distributors in more than 40 countries

## HEAD OFFICE, DENMARK

**GRAS SOUND & VIBRATION**  
Skovlytoften 33  
2840 Holte  
Denmark  
Tel: +45 4566 4046  
[www.GRASacoustics.com](http://www.GRASacoustics.com)  
[gras@grasacoustics.com](mailto:gras@grasacoustics.com)

## USA

**GRAS SOUND & VIBRATION**  
9290 SW Nimbus Avenue  
Beaverton, OR 97008  
Tel: 503-627-0832  
Toll Free: 800-231-7350  
[www.GRASacoustics.com](http://www.GRASacoustics.com)  
[sales-usa@grasacoustics.com](mailto:sales-usa@grasacoustics.com)

## UK

**GRAS SOUND & VIBRATION**  
Unit 115, Gibson House,  
Ermine Business Park, Huntingdon,  
Cambridgeshire, PE29 6XU  
Tel: +44 (0) 7762 584 202  
[www.GRASacoustics.com](http://www.GRASacoustics.com)  
[sales-uk@grasacoustics.com](mailto:sales-uk@grasacoustics.com)

## CHINA

**GRAS SOUND & VIBRATION**  
Room 315, RuiBo Center(T1)  
Lane683, Shenhong Rd,  
Minhang District,  
Shanghai, China, 201107  
Tel: +86 21 64203370  
[www.GRASacoustics.cn](http://www.GRASacoustics.cn)  
[cnsales@grasacoustics.com](mailto:cnsales@grasacoustics.com)



## About GRAS Sound & Vibration

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at [www.grasacoustics.com](http://www.grasacoustics.com)

[grasacoustics.com](http://grasacoustics.com)

**GRAS**  
An Axiometrix Solutions Brand