

Product Brief



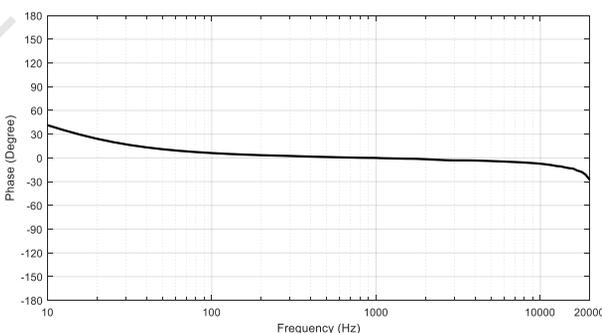
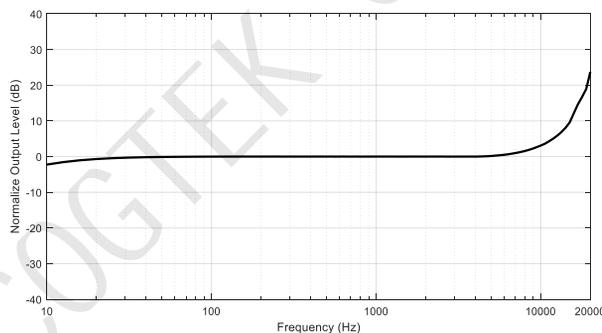
RA2718H

COMPACT ANALOG
TOP PORT
MICROPHONE

PRODUCT DESCRIPTION

The RA2718H is a top port silicon analog microphone, which features high sensitivity, high SNR, and wide flatness frequency response.

The excellent matched and reliability, broad frequency response and stabilized sensitivity performance of RA2718H could support cell phones, tablets, wearable devices, and other portable electronic devices. RA2718H could support codec/BLE MCU to perform better the environmental noise cancellation (ENC) and adaptive noise cancellation (ANC).



PRODUCT FEATURES

- ✓ LFRO: 10Hz
- ✓ Sensitivity of -37 ± 1 dBV/Pa
- ✓ SNR of 63 dBV/Pa
- ✓ AOP : 126 dB SPL
- ✓ 2.75 x 1.85 x 1.25 mm Surface-Mount Package with Top Port

PRODUCT BENEFITS

- ✓ High Flatness : 20Hz(@-1dB) to 7KHz(@+1dB)
- ✓ +/-1dB uniformity to ensure product performance stability
- ✓ 3 passes IR reflow at 260°C
- ✓ Test# according to AEC-Q100-REV-G

TYPICAL APPLICATIONS

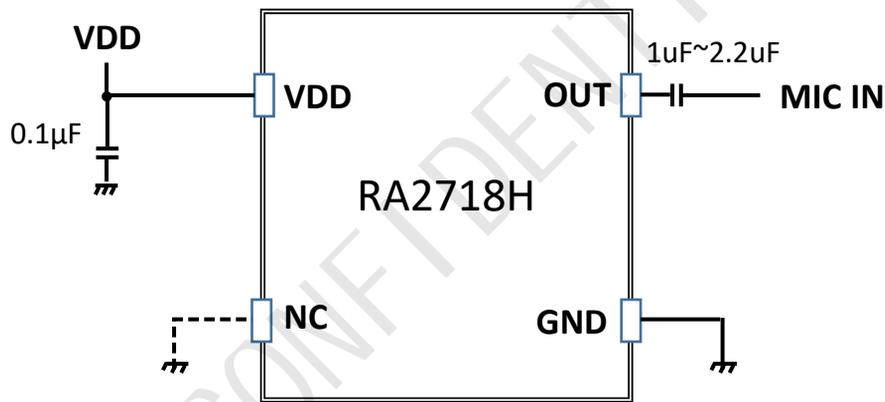
- ✓ cellphone, earphone, speaker phone
- ✓ Wearable Intelligent Equipment
- ✓ True Wireless Stereo
- ✓ Far-field pick-up smart speaker
- ✓ ANC/ENC Headsets

Acoustic Characteristics

Test Conditions: $T_A = 25 \pm 2^\circ\text{C}$, $55\% \pm 20\% \text{ R.H.}$, $V_{DD} = 2.5\text{V}$, no load, unless otherwise indicated

Parameter	Symbol	Values			Units	Notes
		Min	Typ.	Max		
Supply Voltage	V_{DD}	1.6	2.5	3.6	V	
Supply Current	I_{DD}		130		μA	
Sensitivity	SEN		-37		dBV/Pa	94dB SPL @1kHz, +/-1dB variation
Signal to Noise Ratio	SNR		63		dBV/Pa	94dB SPL @ 1kHz, A-weighted
Total Harmonic Distortion	THD		0.1		%	Measuring 2 nd to 5 th harmonic @1kHz
Acoustic Overload Point	AOP		126		dB SPL	THD = 10%, all operating modes
Low Freq. Cutoff Point	LFRO		10		Hz	-3dB relative to 1kHz
High Freq. Flatness	HFF		10		kHz	+3dB relative to 1kHz

Typical Application

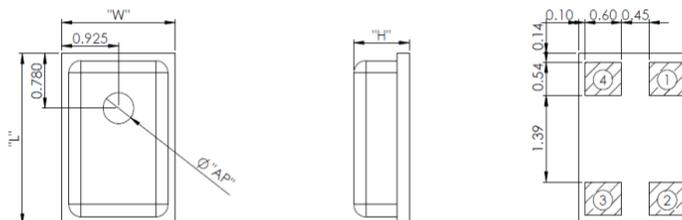


PIN	SYMBOL	DESCRIPTION
1	OUT	Analog output signal
2	GND	Ground
3	NC	No Connect
4	VDD	Power Supply

Note : 1. PIN3 can be connected to GND or NC for SMT convenience.

PACKAGE INFORMATION

ITEM	DIMENSION	TOLERANCE	UNITS
LENGTH(L)	2.75	± 0.100	mm
WIDTH(W)	1.85	± 0.100	mm
HEIGHT(H)	1.25	± 0.100	mm
ACOUSTIC PORT (AP)	$\varnothing 0.50$	± 0.050	mm



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The product brief is for information purposes of quickly understanding the key features, benefits. We kindly ask customers to refer to the relevant product datasheets provided by sales or marketing representatives. Our customers and their technical departments are required to evaluate the suitability of our products for the intended application.

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