

**SERIES:** CMS-3648-18X | **DESCRIPTION:** SPEAKER**FEATURES**

- 500 Hz resonance frequency
- 101 dB @ 0.1m
- multiple termination options

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	max power: IEC-60268-5, filter 60 seconds on, 120 seconds off, 10 cycles (room temp)		1.5	2.0	W
impedance	at 2.0 kHz	6.8	8	9.2	Ω
resonant frequency (Fo)	at 1.0 V	400	500	600	Hz
frequency response		Fo		5,000	Hz
sound pressure level	at 1.5 W, 10 cm, avg at 0.8, 1.0, 1.2, 1.5 kHz	98	101	104	dB
distortion	at 1.5 W (see THD curve)				%
buzz, rattle, etc.	not audible at sine wave between Fo-5 kHz			3.46	V
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	\varnothing 36.0 x 4.8				mm
magnet	Nd-Fe-B				
frame material	metal				
cone material	PET				
weight	solder pad model wire leads model		8.70 9.35		g g
operating temperature		-20		60	$^{\circ}$ C
storage temperature		-40		65	$^{\circ}$ C
hand soldering	for 1-3 seconds	370	380	390	$^{\circ}$ C
RoHS	yes				

Notes: 1. All specifications measured at 5-35 $^{\circ}$ C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

PART NUMBER KEY**CMS - 3648 - 18 XX**

Base Number

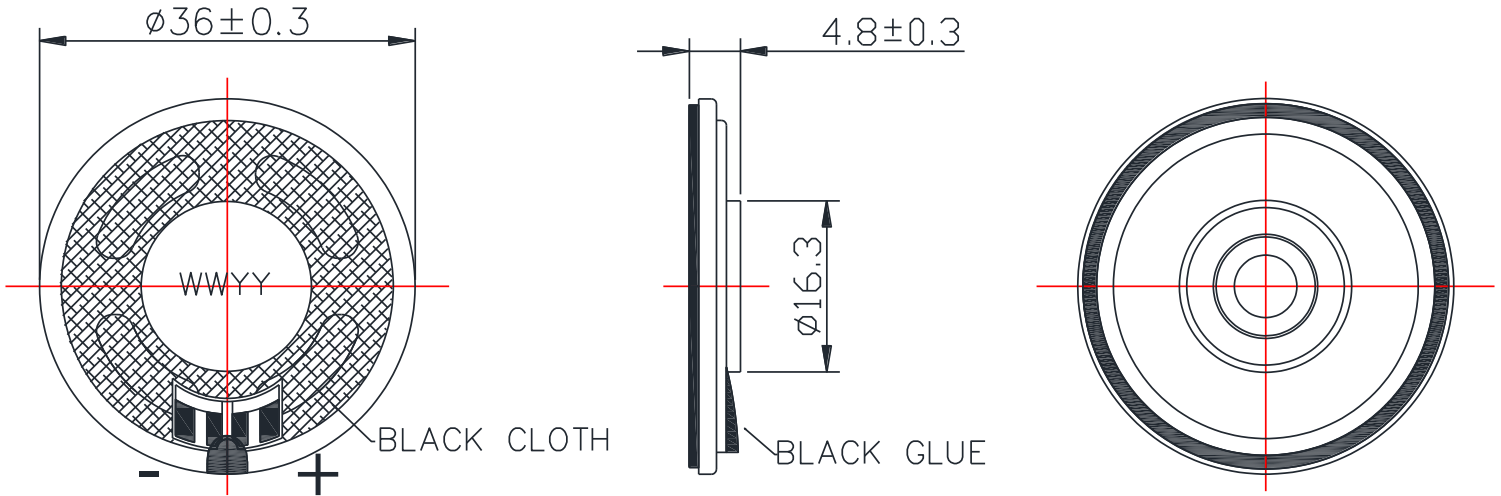
Termination Options:

SP = solder pads

L200 = 200 mm wire leads

MECHANICAL DRAWING (SOLDER PADS)

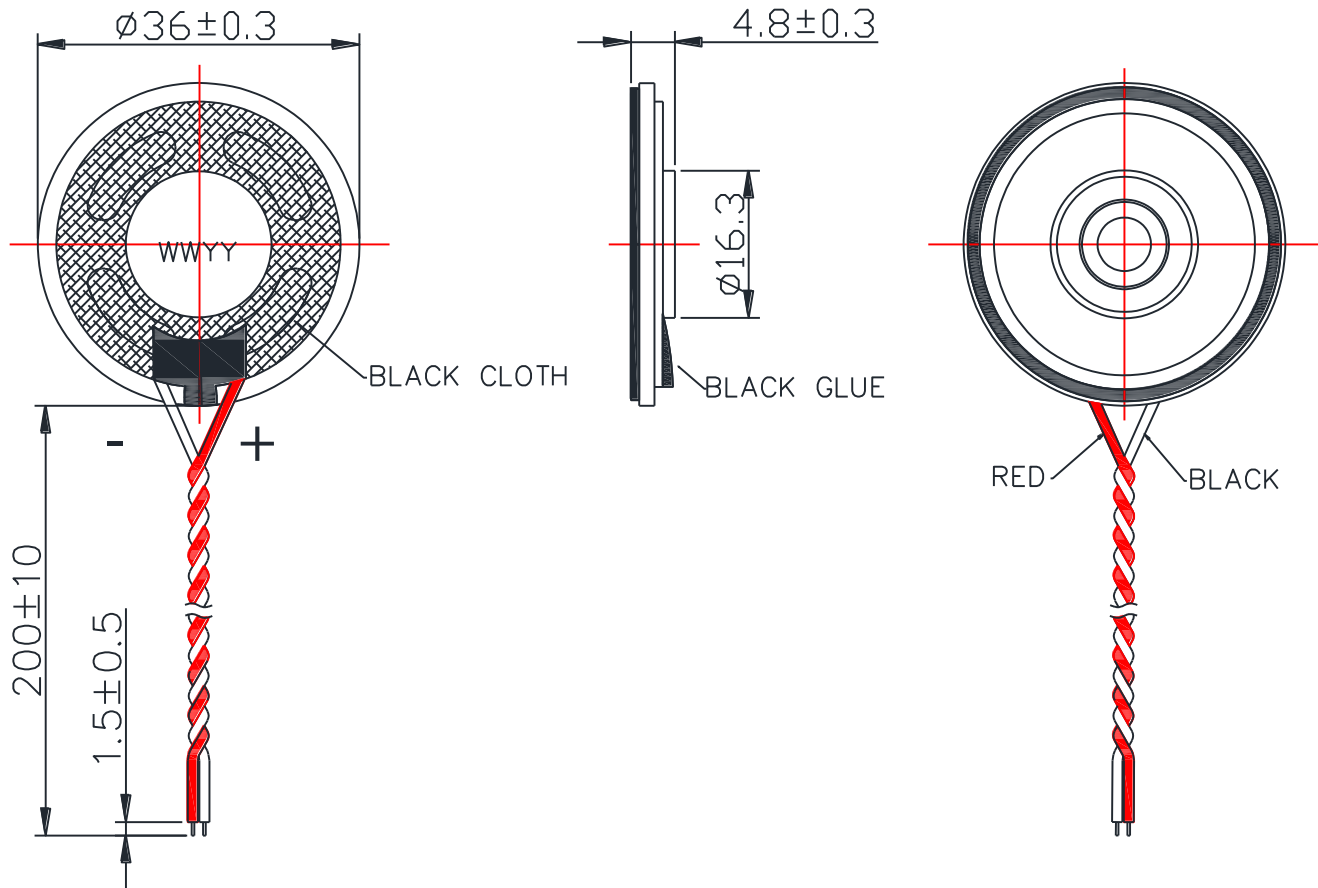
units: mm
tolerance: ± 0.3 mm



MECHANICAL DRAWING (WIRE LEADS)

units: mm
tolerance: ± 0.3 mm

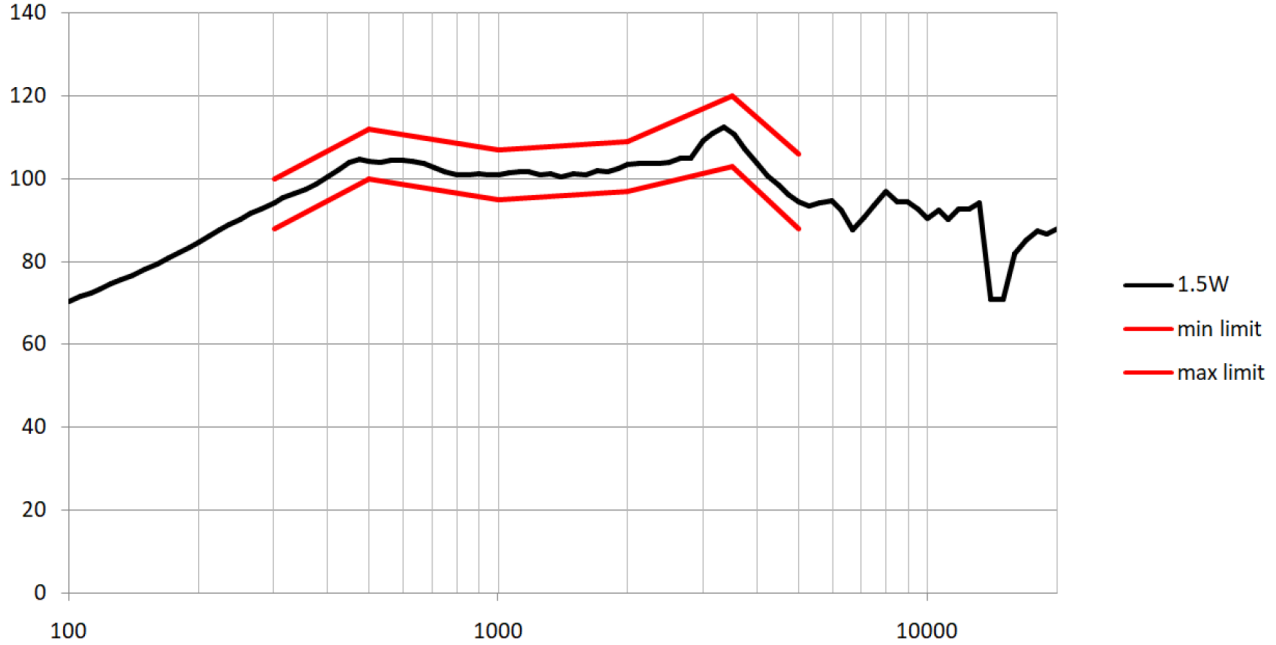
wire: UL1571 28 AWG



RESPONSE CURVES

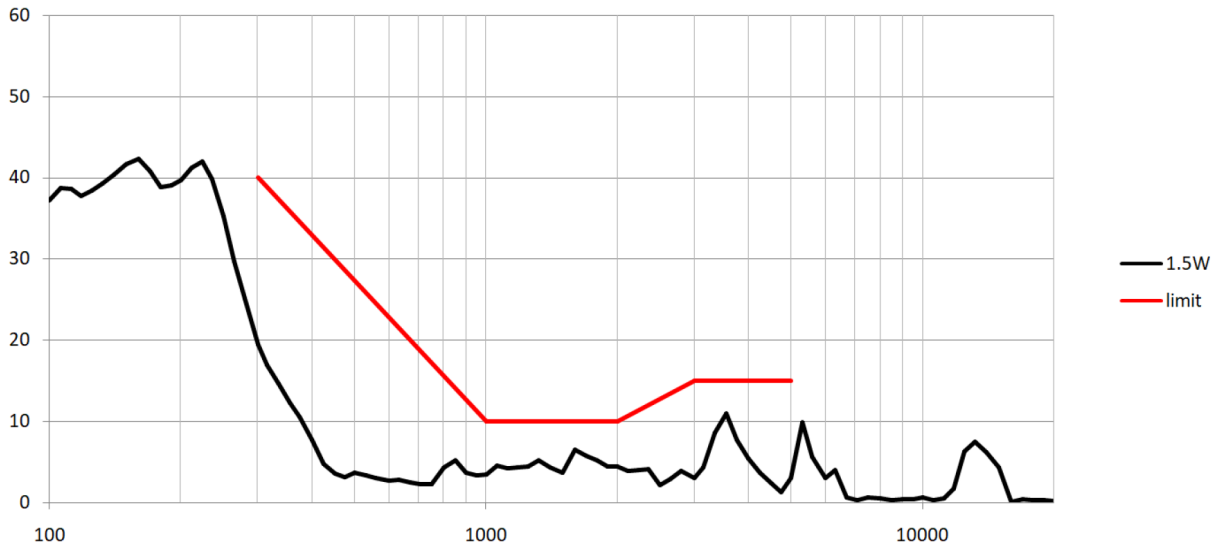
Frequency Response Curve

Test Conditions: 1.5 W / 10 cm



Total Harmonic Distortion Curve

Test Conditions: 1.5 W / 10 cm



THIELE-SMALL PARAMETERS

parameter	conditions/description	typ
Mechanical Q Factor	Qms	4.827
Electrical Q Factor	Qes	14.298
Total Q Factor	Qts	3.609
Compliance Equivalent Volume	Vas	0.0425

Notes: 2. Results represent typical performance in Free Air conditions.

REVISION HISTORY

rev.	description	date
1.0	initial release	06/11/2026

The revision history provided is for informational purposes only and is believed to be accurate.



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