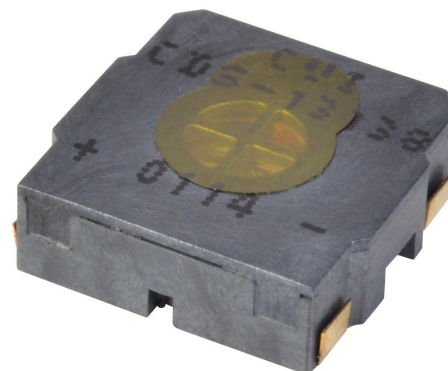


**MODEL:** CDS-13138-SMT | **DESCRIPTION:** SPEAKER

**FEATURES**

- SMT (surface mount) speaker
- reflow solder capable
- wide operating temp range
- compact size

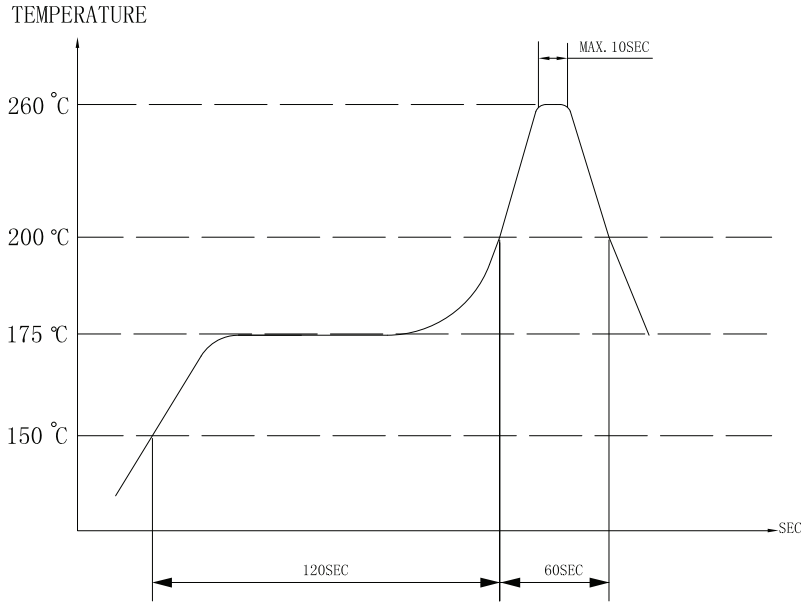

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	maximum power: IEC-60268-5, filter 60s on/120s off, 10 cycles at room temp		0.7	1.0	W
impedance	at 1.5 kHz, 1.0 V	6.8	8	9.2	$\Omega$
resonant frequency (Fo)	at 1.0 V	680	850	1,020	Hz
frequency response	output SPL $\pm$ 10 dB	Fo		20,000	Hz
sound pressure level	at 0.7 W, 0.1 m ave, at 1.0, 1.6, 2.0, 3.2 kHz	84	87	90	dB
	at 1.0 W, 1.0 m ave, at 1.0, 1.6, 2.0, 3.2 kHz	67	70	73	dB
distortion	at 2.0 kHz, 0.7 W			5	%
buzz, rattle, etc.	must be normal at sine wave between Fo ~ 20 kHz		2.37		V
dimensions	13 x 13 x 4.0				mm
magnet	Sm <sub>2</sub> Co <sub>17</sub> , $\varnothing$ 6.0 x 1.0 mm				
material	LCP				
cone material	mylar				
terminal	surface mount, Au plating				
weight			1.1		g
operating temperature		-40		85	$^{\circ}$ C
storage temperature		-40		85	$^{\circ}$ C
washable	yes				
RoHS	2011/65/EU				

Notes: 1. All specifications measured at 5~35 $^{\circ}$ C, humidity at 45~85%, under 86~106kPa pressure, unless otherwise noted.  
2. Add suffix "-TR" to the model for tape and reel packaging.

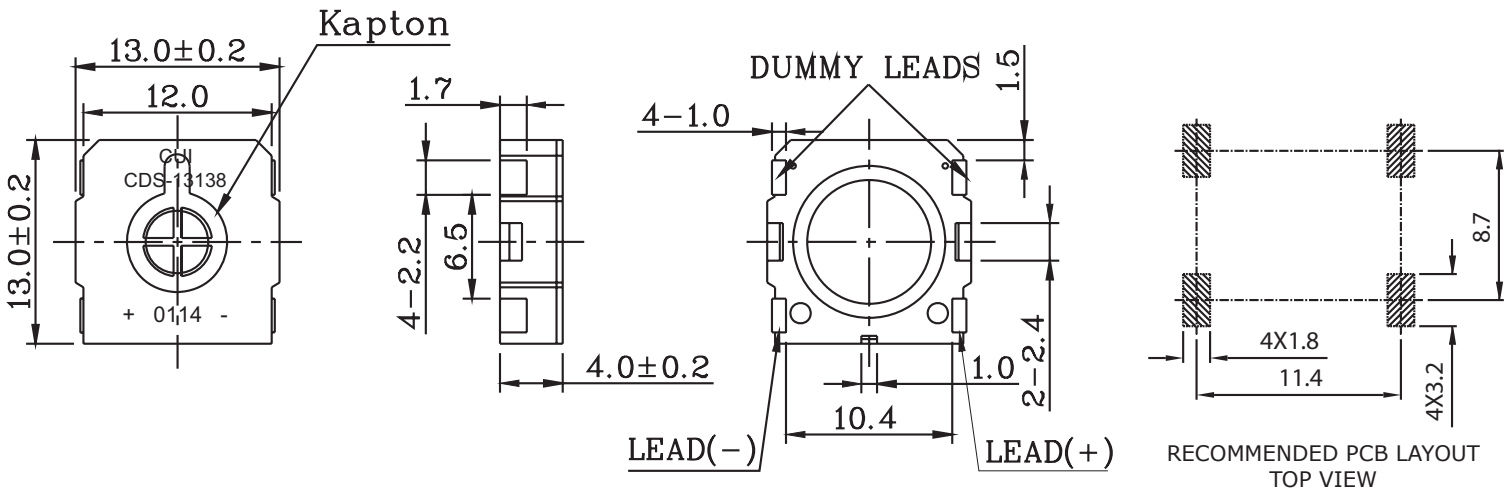
## SOLDERABILITY

parameter	conditions/description	min	typ	max	units
reflow soldering	see reflow profile			260	°C



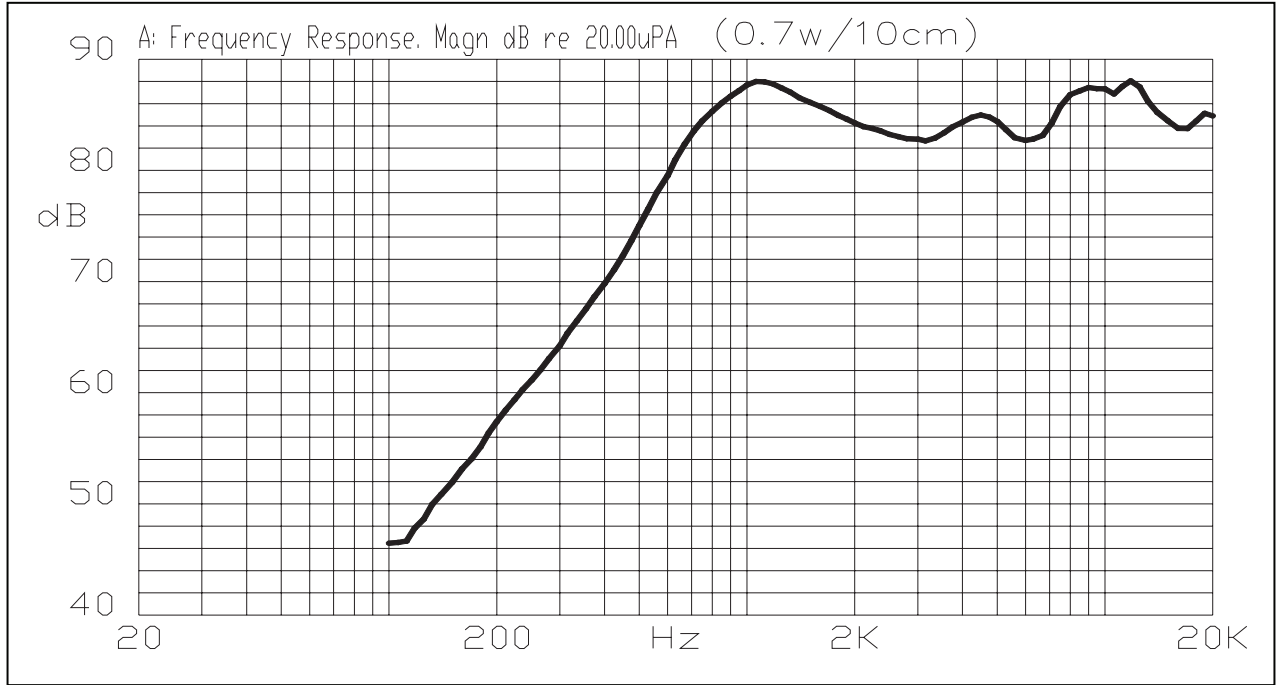
## MECHANICAL DRAWING

units: mm  
tolerance: ±0.25 mm

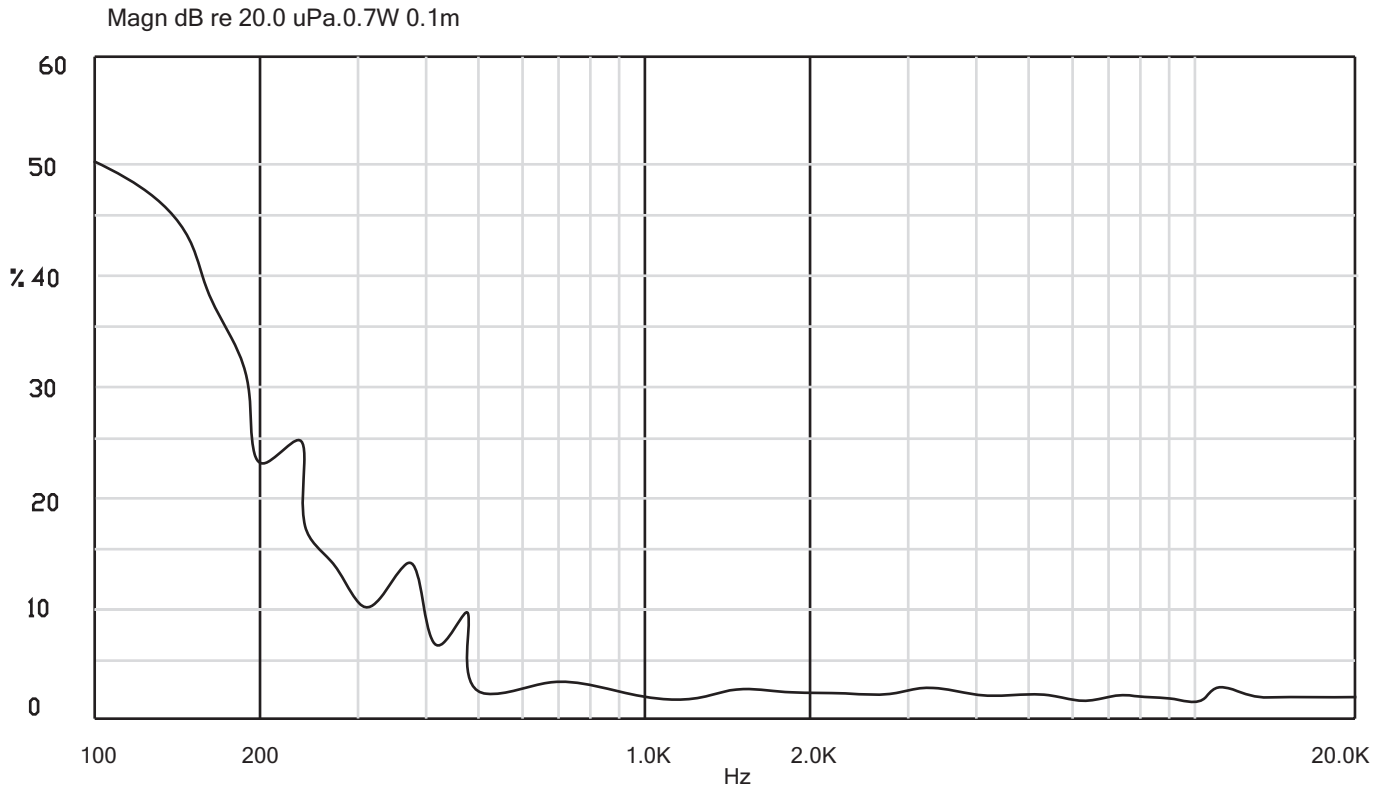


## RESPONSE CURVES

### Frequency Response Curve



### Total Harmonic Distortion Curve



## REVISION HISTORY

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rev.	description	date
1.0	initial release	03/12/2015

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



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CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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