

**MODEL:** CLS0231MA-1-L152 | **DESCRIPTION:** SPEAKER**FEATURES**

- 23 mm
- round frame
- 0.5 W
- 8  $\Omega$
- neodymium magnet
- mylar cone
- wire leads

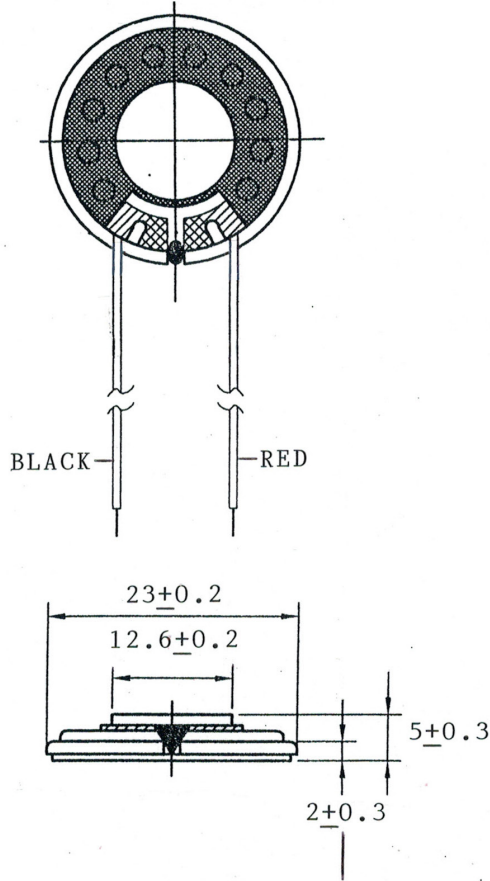
**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power			0.5	1.0	W
impedance	at 1.0 kHz, 1.0 V	6.8	8	9.2	$\Omega$
resonant frequency (Fo)	at 1.0 V	536	670	804	Hz
frequency response		Fo		20,000	Hz
sound pressure level	at 1.0 W, 50 cm, avg at 0.8, 1.0, 1.2, 1.5 kHz	86	89	92	dB
buzz, rattle, etc.	must be normal at sine wave			2.0	V
dimensions	$\varnothing 23 \times 5$				mm
magnet	Nd-Fe-B				
cone material	mylar				
terminal	wire leads				
weight			4.4		g
operating temperature		-25		60	$^{\circ}\text{C}$
hand soldering	for maximum 3 seconds	340	350	360	$^{\circ}\text{C}$
RoHS	yes				

## MECHANICAL DRAWING

units: mm

wire: UL1007 28 AWG  
wire length: 152 mm



## FREQUENCY RESPONSE CURVE

parameter	conditions/description
potentiometer range	50 dB
rectifier	RMS
lower limit frequency	20 Hz
wr. speed	100 mm/sec
zero level	60 dB

