Additional Resources: Product Page | 3D Model

# **CUI** DEVICES

**date** 09/15/2020

page 1 of 6

MODEL: CPT-407-105-L60 | DESCRIPTION: PIEZO BUZZER TRANSDUCER

#### **FEATURES**

- 14 Vdc
- 105 dB
- feedback wire





#### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage	driven by RE46C100		14		Vdc
operating voltage	driven by RE46C100	6		16	Vdc
current consumption	measured by FLUKE 87V		30	45	mA
rated frequency		2,700	3,200	3,700	Hz
sound pressure level	at 30 cm, rated voltage, driven by RE46C100	105			dB
electrostatic capacitance	at 1.0, 120 Hz	35,000	50,000	65,000	pF
tone	continuous				
dimensions	Ø39.7 x 6.65				mm
weight				4.0	g
material	PBT+30% GF (UL94V-0)				
terminal	wire leads with connector				
operating temperature		-30		85	°C
storage temperature		-30		85	°C
humidity		20		75	RH%
washable	no				
RoHS	yes				

Notes: 1. All specifications measured at  $5\sim35^{\circ}$ C, humidity at  $45\sim85\%$ , under  $86\sim106$  kPa pressure, unless otherwise noted.

#### **MECHANICAL DRAWING**

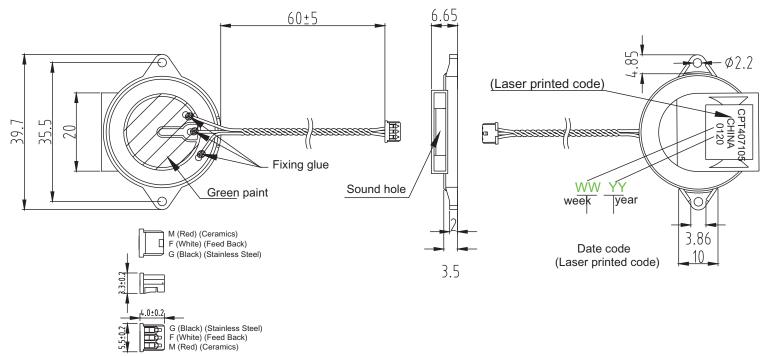
units: mm

tolerance: ±0.5 mm

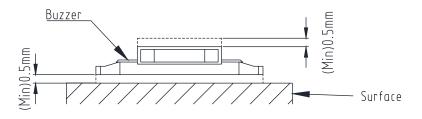
wire: UL10064 32 AWG

connector: Molex 51021-0300 / MLX 1.25 mm

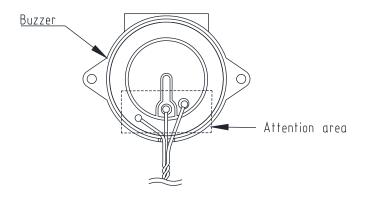
terminal: Molex 50058-8000



#### **INSTALLATION GUIDELINES**

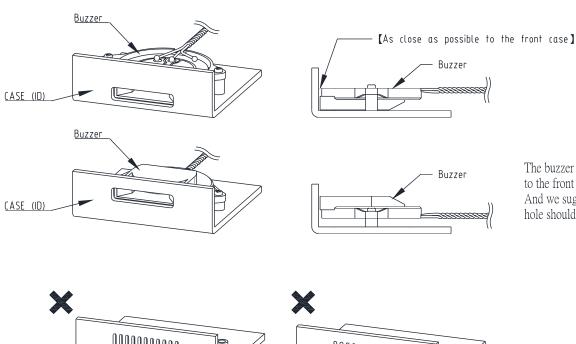


It's recommended reserve at least 0.5mm between the product and the surface. And the surface must not have any protrusions.

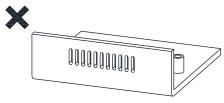


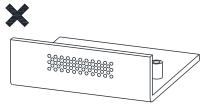
If buzzer's piezo side close to any potentially conductive surface, it is recommended that the product body surface (not piezo side) should add insulating tape to prevent short circuit conditions.

### THE NOTICE OF THE CASE ID DESIGN



The buzzer should be as close as possible to the front case or the SPL will decrease. And we suggest the design of the sound hole should be simple.

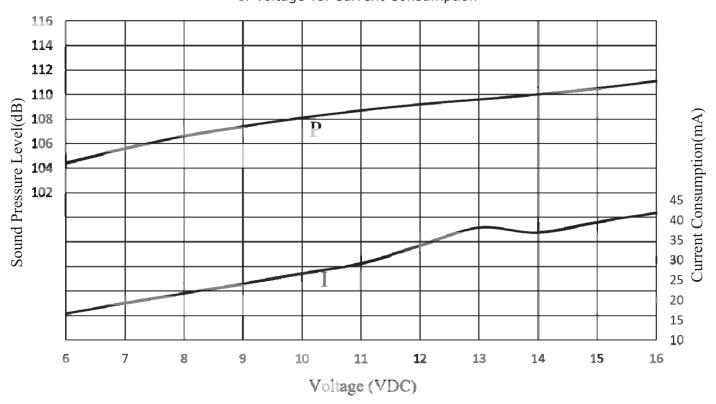




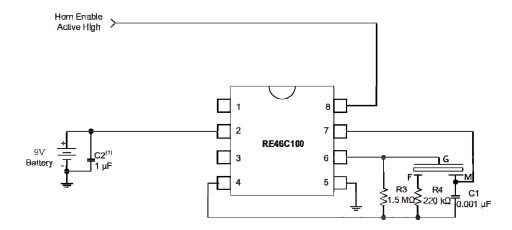
Both types of ID design may decrease the SPL 6 to 12dB, it's highly recommended to avoid these designs.

#### **PERFORMANCE CURVES**

P: Voltage vs. Sound Pressure Level I: Voltage vs. Current Consumption



#### **DRIVING CIRCUIT**



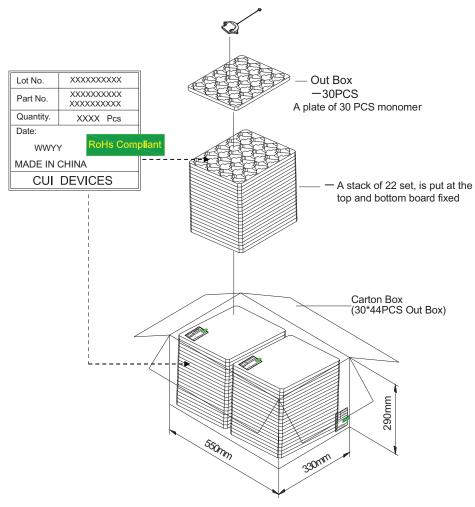
Notes:

- 1. Place C2 close to the device power pins to minimize horn switching noise.
- 2. The current consumption and the sound pressure level are measured by using the recommended driving circuit shown above.

#### **PACKAGING**

units: mm

Carton Size: 550 x 330 x 290 mm Carton QTY: 1,320 pcs per carton



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CUI Devices | MODEL: CPT-407-105-L60 | DESCRIPTION: PIEZO BUZZER TRANSDUCER date 09/15/2020 | page 6 of 6

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	09/15/2020

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

## **CUI** DEVICES

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

CUI Devices reserves the right to make changes to the product at any time without notice. Information provided by CUI Devices is believed to be accurate and reliable. However, no responsibility is assumed by CUI Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI Devices products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.