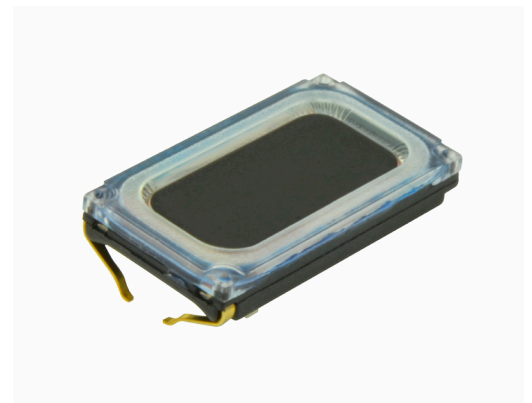


SERIES: CMS-16093-078X-67 | **DESCRIPTION:** SPEAKER**FEATURES**

- IP67 rated face
- protection against dust and water ingress
- micro-speaker
- 3 mm height
- 5 available termination options

**SPECIFICATIONS**

| parameter | conditions/description | min | typ | max | units |
|-------------------------|--|------------|------------|--------------|--------------------|
| input power | max power: as per IEC-268-1, in 1 cc box | | 0.7 | 1.0 | W |
| impedance | at 2.0 kHz, 2.37 Vrms, in 1 cc box | 6.8 | 8 | 9.2 | Ω |
| coil resistance | | 6.48 | 7.2 | 7.92 | Ω |
| resonant frequency (Fo) | at 1.0 Vrms in free air, 10 cm at 2.37 Vrms in 1 cc box, 10 cm | 440 680 | 550 850 | 660 1,020 | Hz Hz |
| frequency response | | 100 | | 20,000 | Hz |
| sound pressure level | at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box | 88 | 91 | 94 | dB |
| distortion | at 800~1,200 Hz, 2.37 Vrms, 10 cm at 1,201~5,000 Hz, 2.37 Vrms, 10 cm | | | 15 10 | % % |
| buzz, rattle, etc. | must be normal at sine wave, 0.2~2 kHz, 1 cc box | | | 2.37 | Vrms |
| polarity | cone moves forward w/ positive dc current to "+" terminal | | | | |
| dimensions | 16 x 9 x 3 | | | | mm |
| magnet | Nd-Fe-B | | | | |
| cone material | PEEK | | | | |
| weight | | | 1.3 | | g |
| operating temperature | | -20 | | 50 | $^{\circ}\text{C}$ |
| storage temperature | | -40 | | 65 | $^{\circ}\text{C}$ |
| hand soldering | for maximum 3 seconds (N/A for spring contacts) | | | 380 | $^{\circ}\text{C}$ |
| RoHS | yes | | | | |
| IP level | IP67 (front side) | | | | |

Notes: 1. All specifications measured at 15~35 $^{\circ}\text{C}$, humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

PART NUMBER KEY**CMS-16093-078 XX - 67**

Base Number

Termination Options:

S = spring contacts

SP = solder pads

L100 = wire leads, no connector

L100A = wire leads with Molex housing 51021-0200

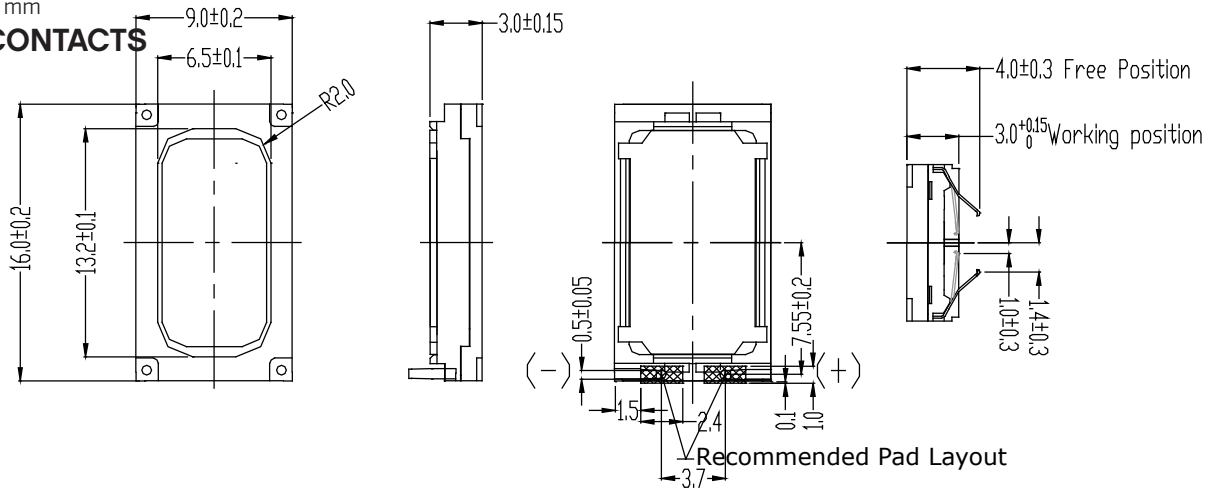
L100B = wire leads with JST housing SHR-02V-S-B

MECHANICAL DRAWINGS

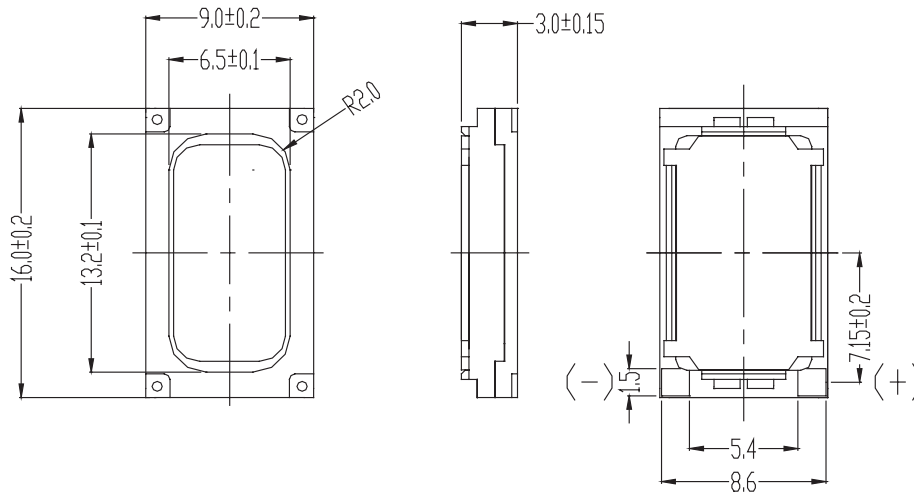
units: mm

tolerance: ± 0.2 mm

SPRING CONTACTS



SOLDER PADS

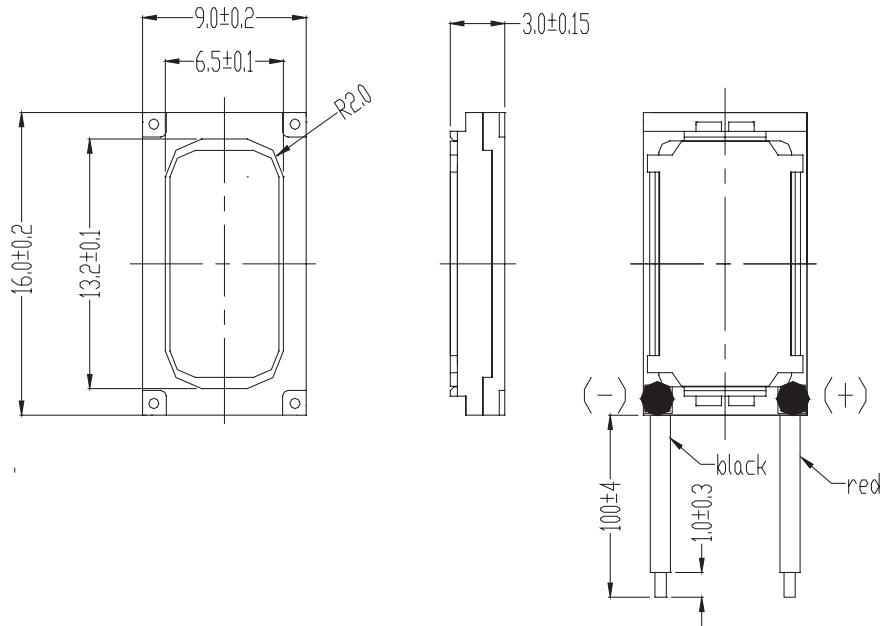


MECHANICAL DRAWINGS (CONTINUED)

units: mm
tolerance: ± 0.2 mm

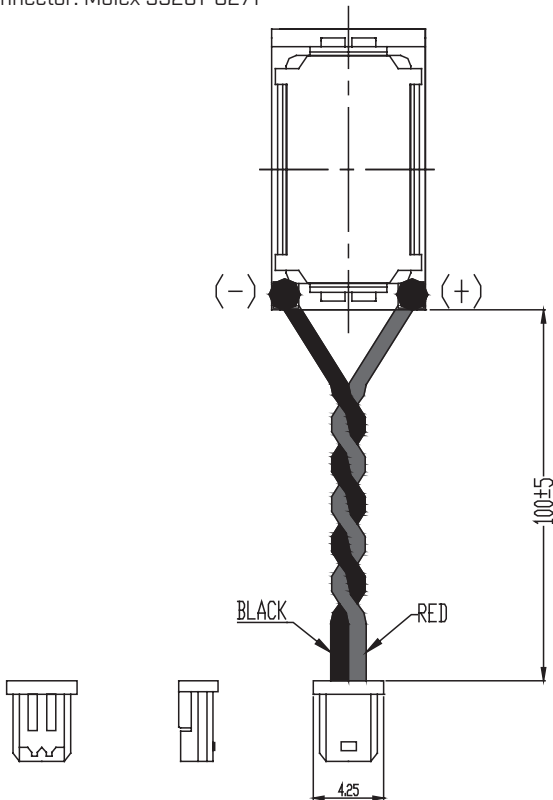
WIRE LEADS, NO CONNECTOR

wire: UL 1571 32 AWG



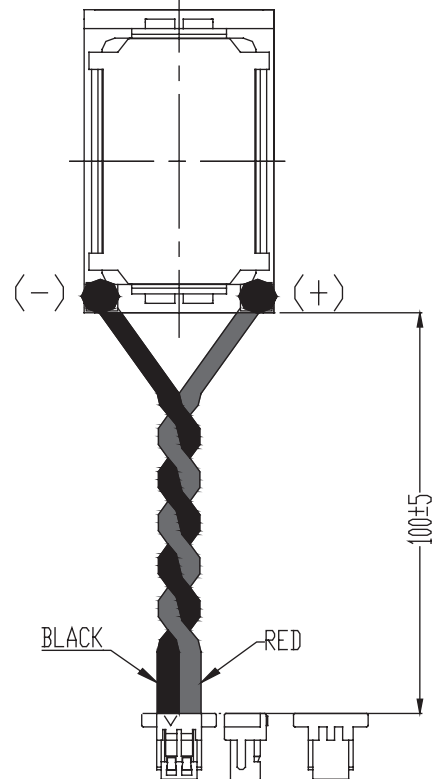
WIRE LEADS WITH MOLEX CONNECTOR

wire: UL 1571 30 AWG
connector: Molex 51021-0200
mating connector: Molex 53261-0271



WIRE LEADS WITH JST CONNECTOR

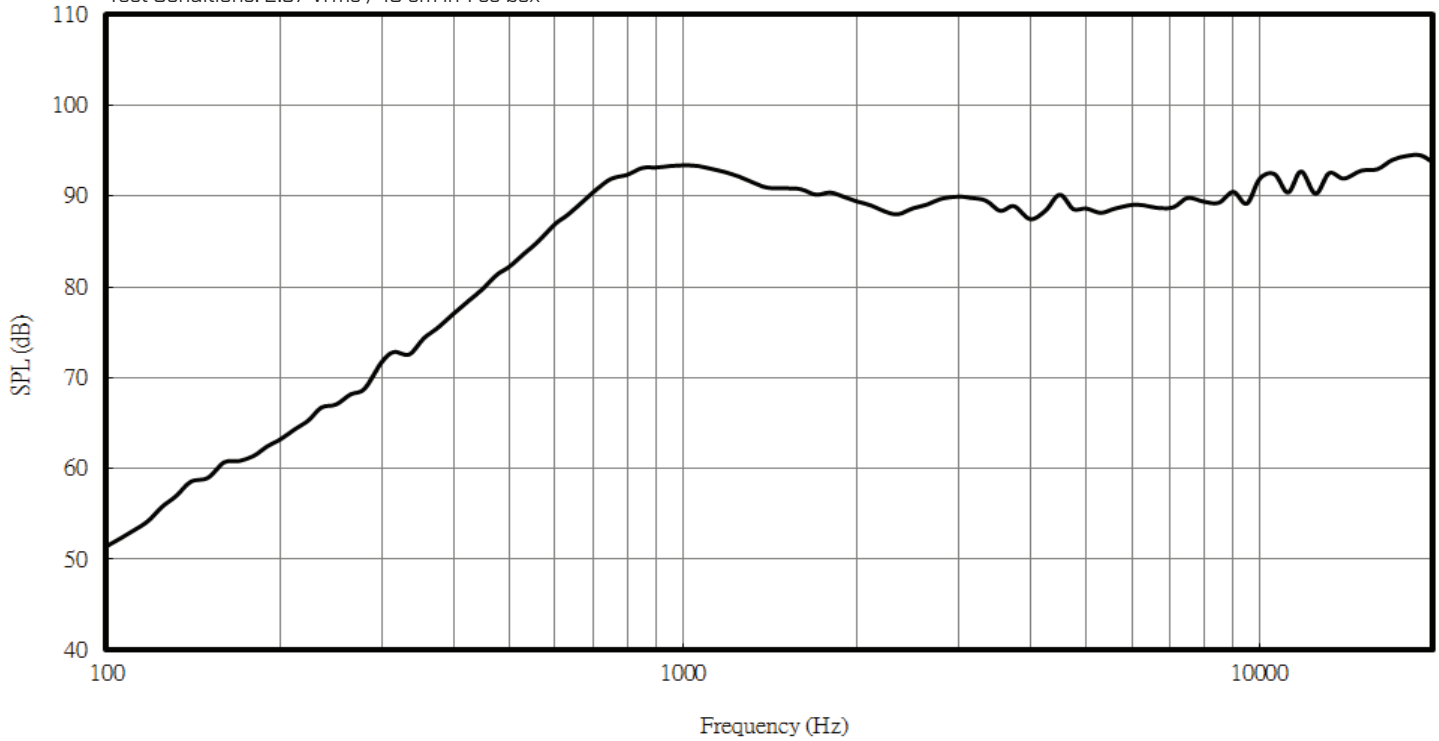
wire: UL 1571 30 AWG
connector: JST SHR-02V-S-B
mating connector: JST BM02B-SRSS-TB



RESPONSE CURVES

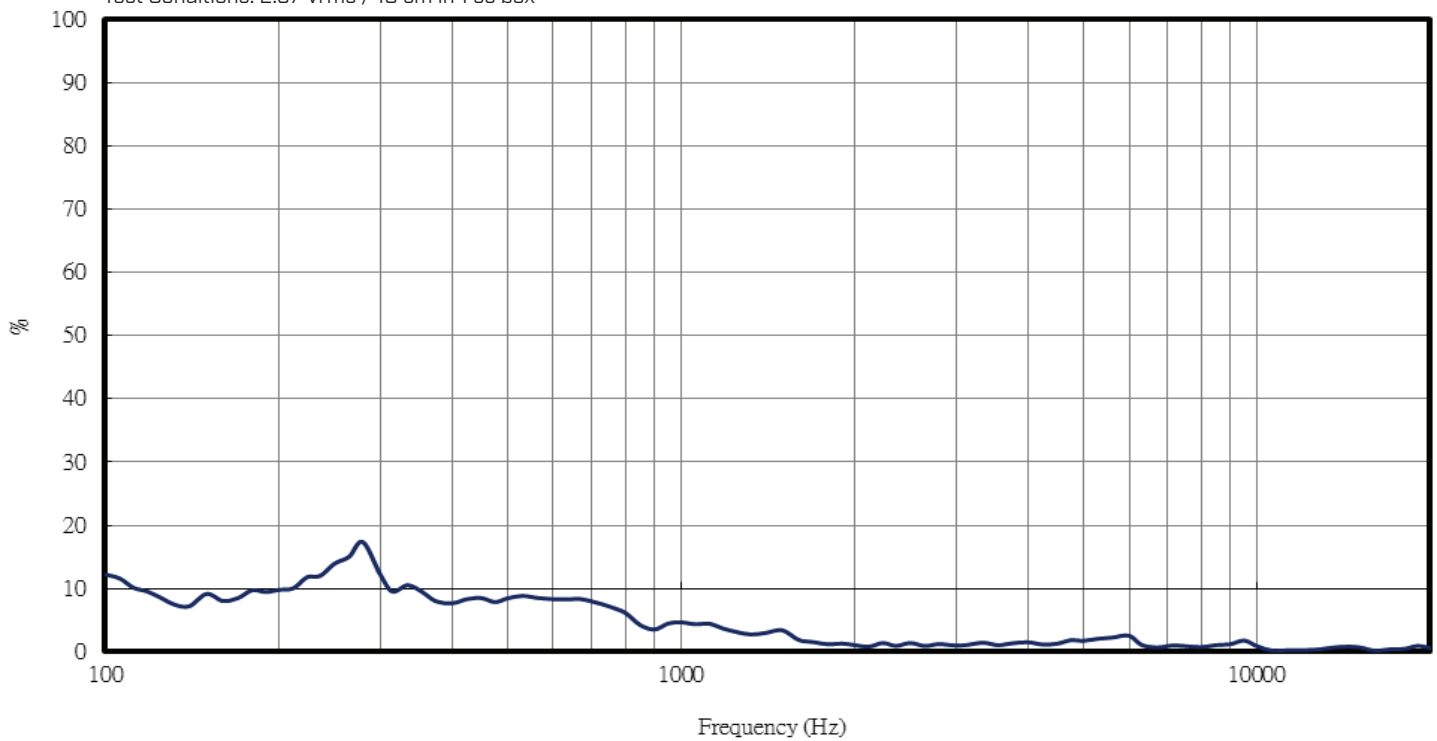
Frequency Response Curve

Test Conditions: 2.37 Vrms / 10 cm in 1 cc box



Total Harmonic Distortion Curve

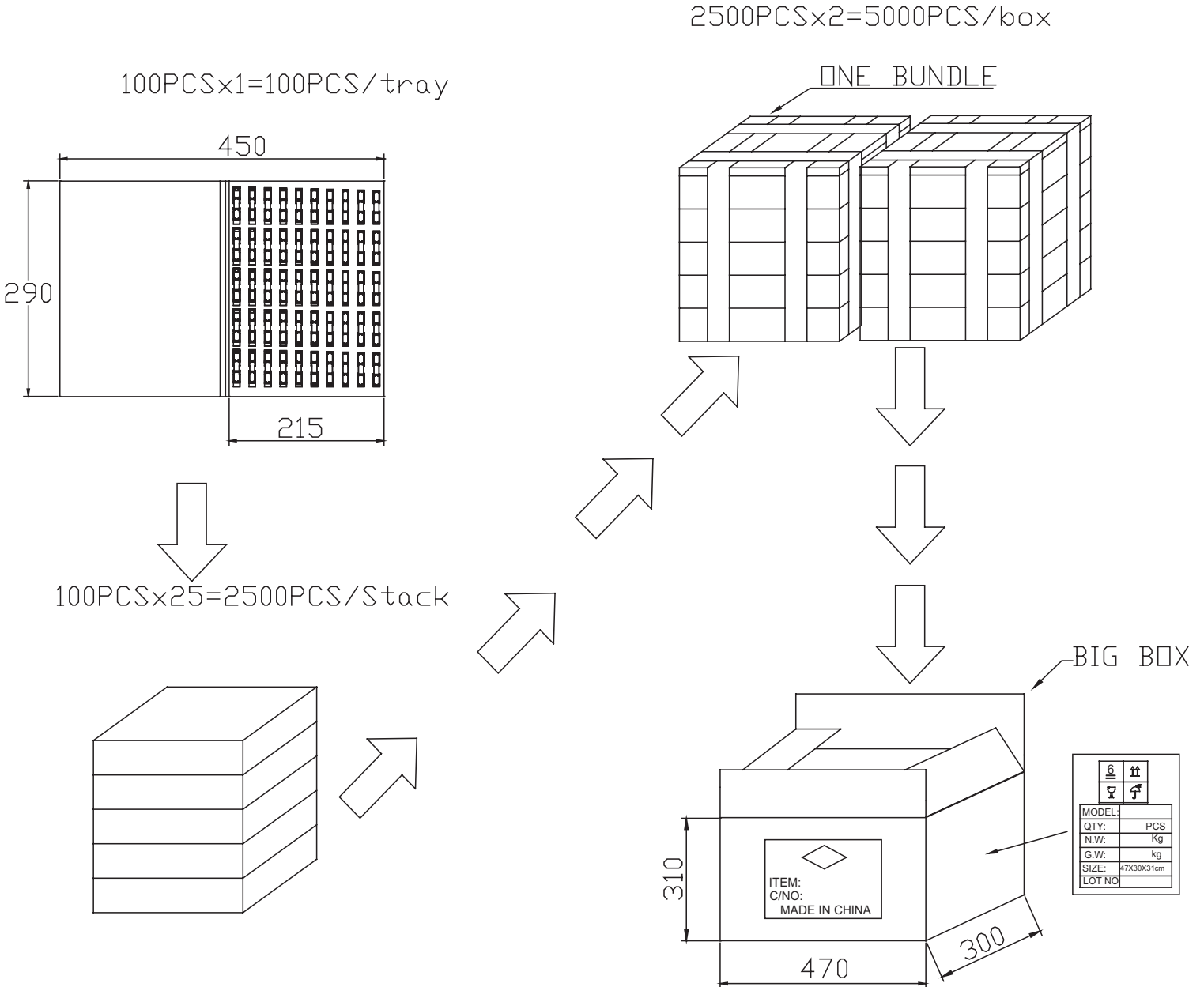
Test Conditions: 2.37 Vrms / 10 cm in 1 cc box



PACKAGING

units: mm

Tray Size: 290 x 215 mm
 Tray QTY: 100 pcs per tray
 Carton Size: 470 x 300 x 310 mm
 Carton QTY: 5,000 pcs per carton



REVISION HISTORY

| rev. | description | date |
|------|--|------------|
| 1.0 | initial release | 07/23/2018 |
| 1.01 | brand update | 01/24/2020 |
| 1.02 | added Molex and JST connector options, updated packaging | 10/23/2020 |
| 1.03 | logo, datasheet style update | 08/05/2022 |

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



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

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