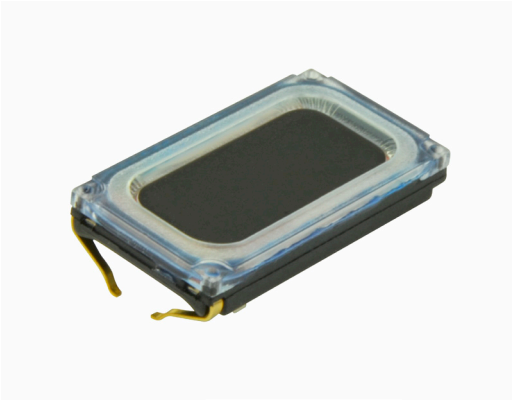
CUDEVICES

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

FEATURES

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



RoHS IP67

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	°C
storage temperature		-40		65	°C
hand soldering	for maximum 3 seconds (N/A for spring contacts)			380	°C
RoHS	yes				
IP level	IP67 (front side)				

Notes: 1. All specifications measured at 15~35°C, humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

PART NUMBER KEY

CMS-16093-078 XX - 67

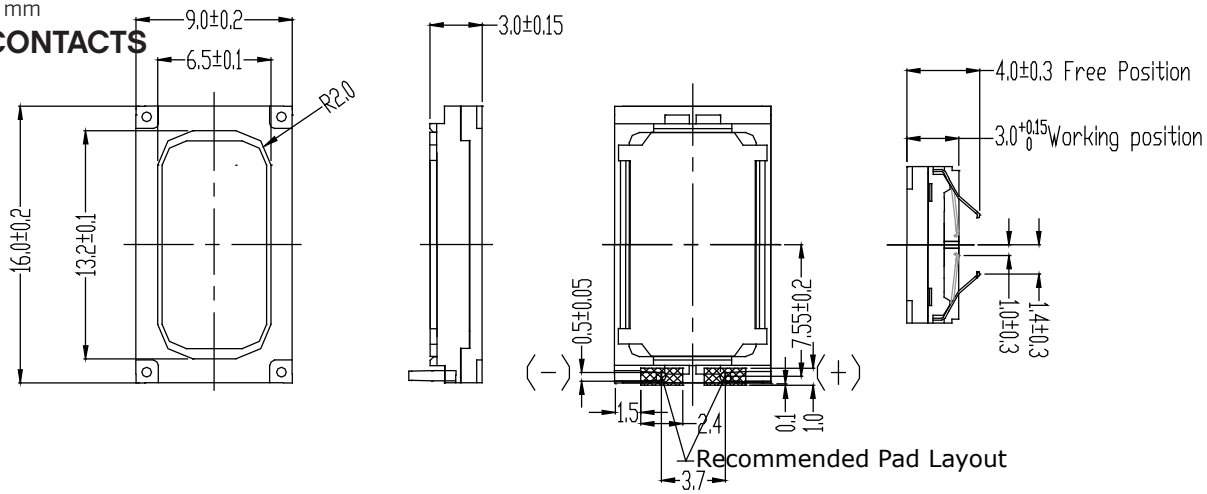
Base Number

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

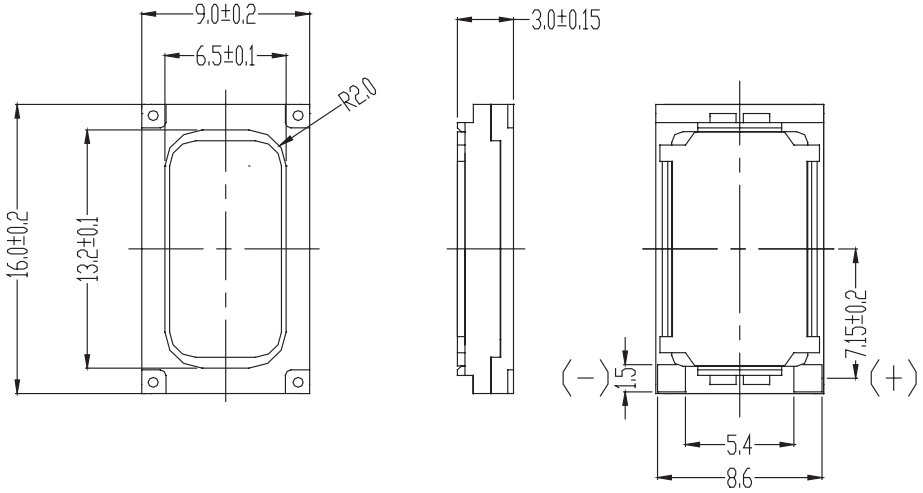
MECHANICAL DRAWINGS

units: mm
tolerance: ±0.2 mm

SPRING CONTACTS



SOLDER PADS

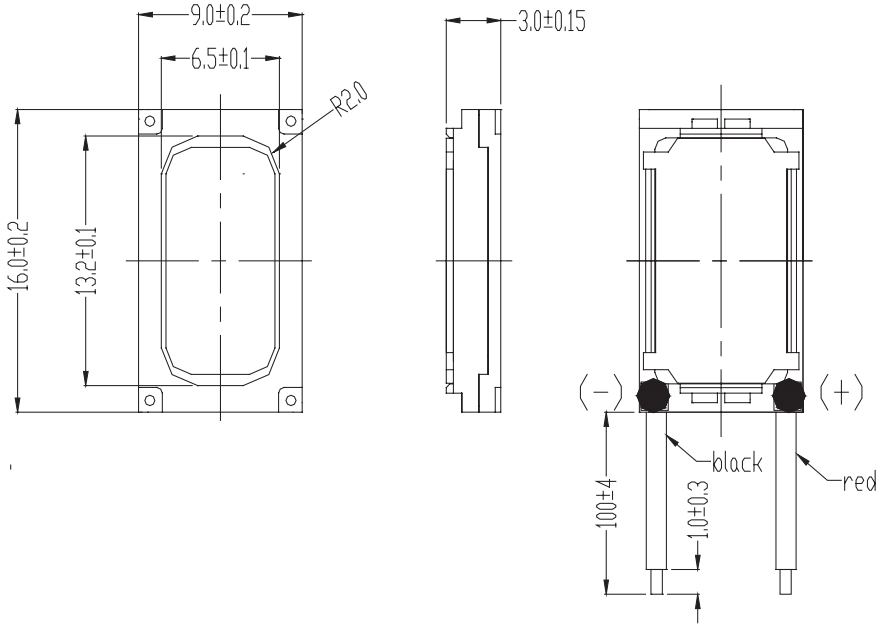


MECHANICAL DRAWINGS (CONTINUED)

units: mm
tolerance: ±0.2 mm

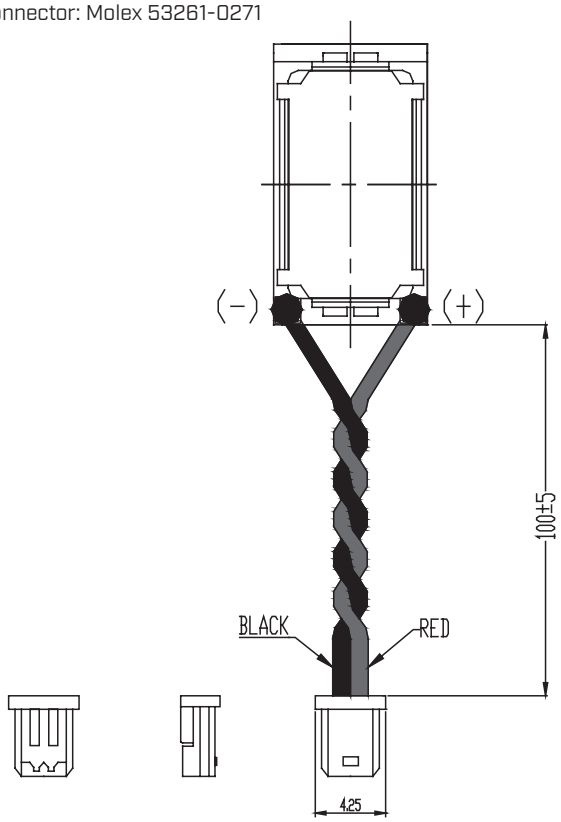
WIRE LEADS, NO CONNECTOR

wire: UL 1571 32 AWG



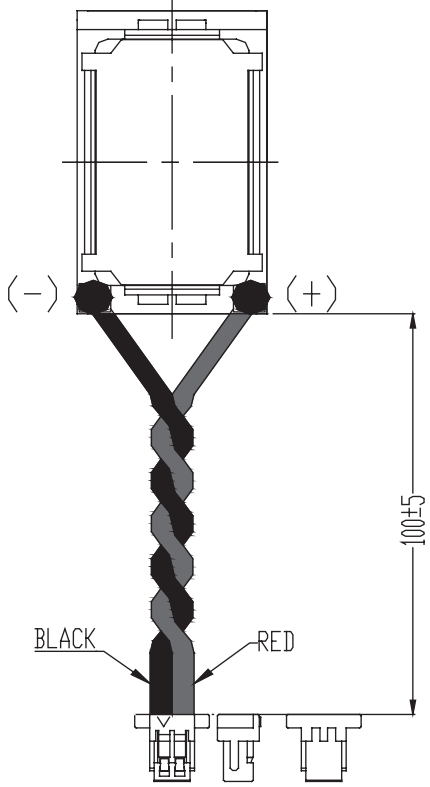
WIRE LEADS WITH MOLEX CONNECTOR

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



WIRE LEADS WITH JST CONNECTOR

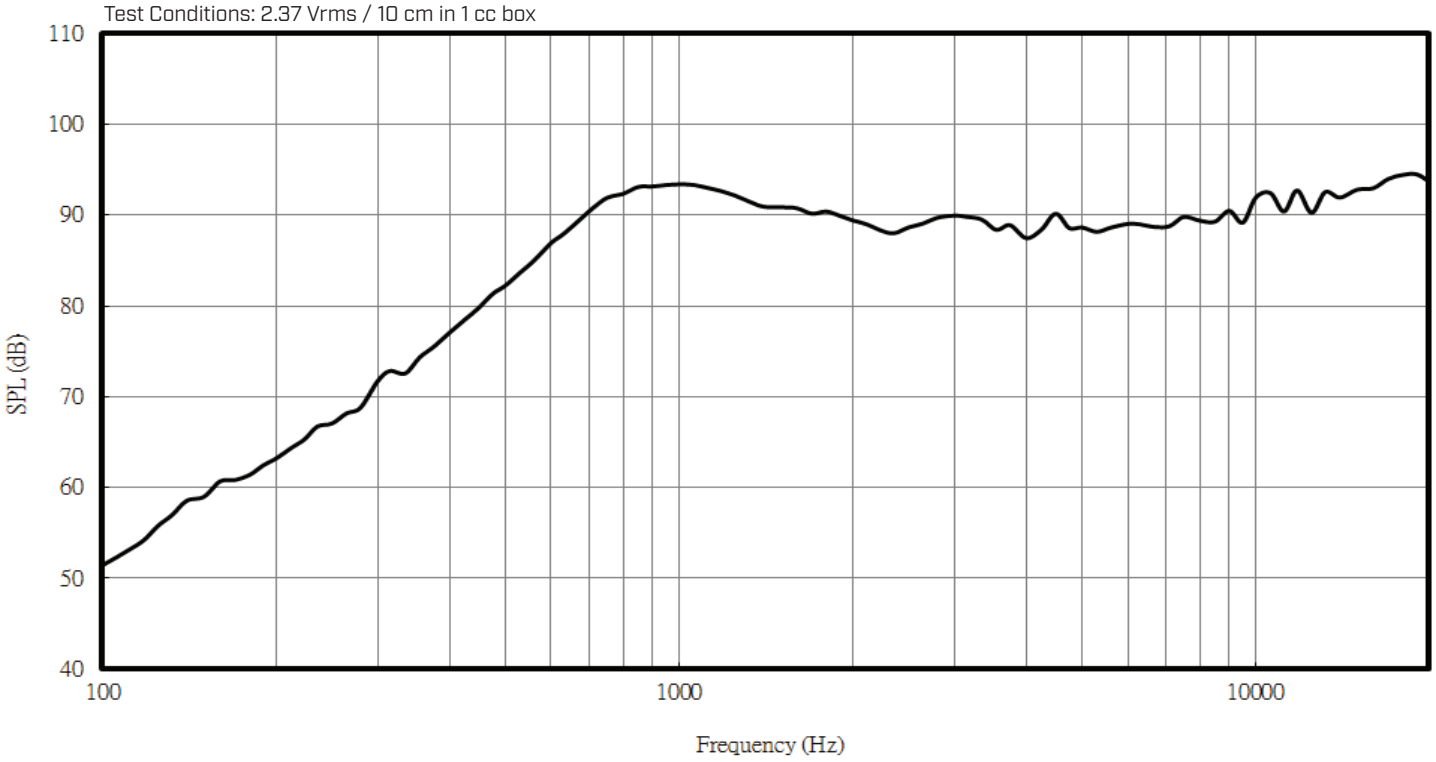
wire: UL 1571 30 AWG
connector: JST SHR-02V-S-B
mating connector: JST BM02B-SRSS-TB



RESPONSE CURVES

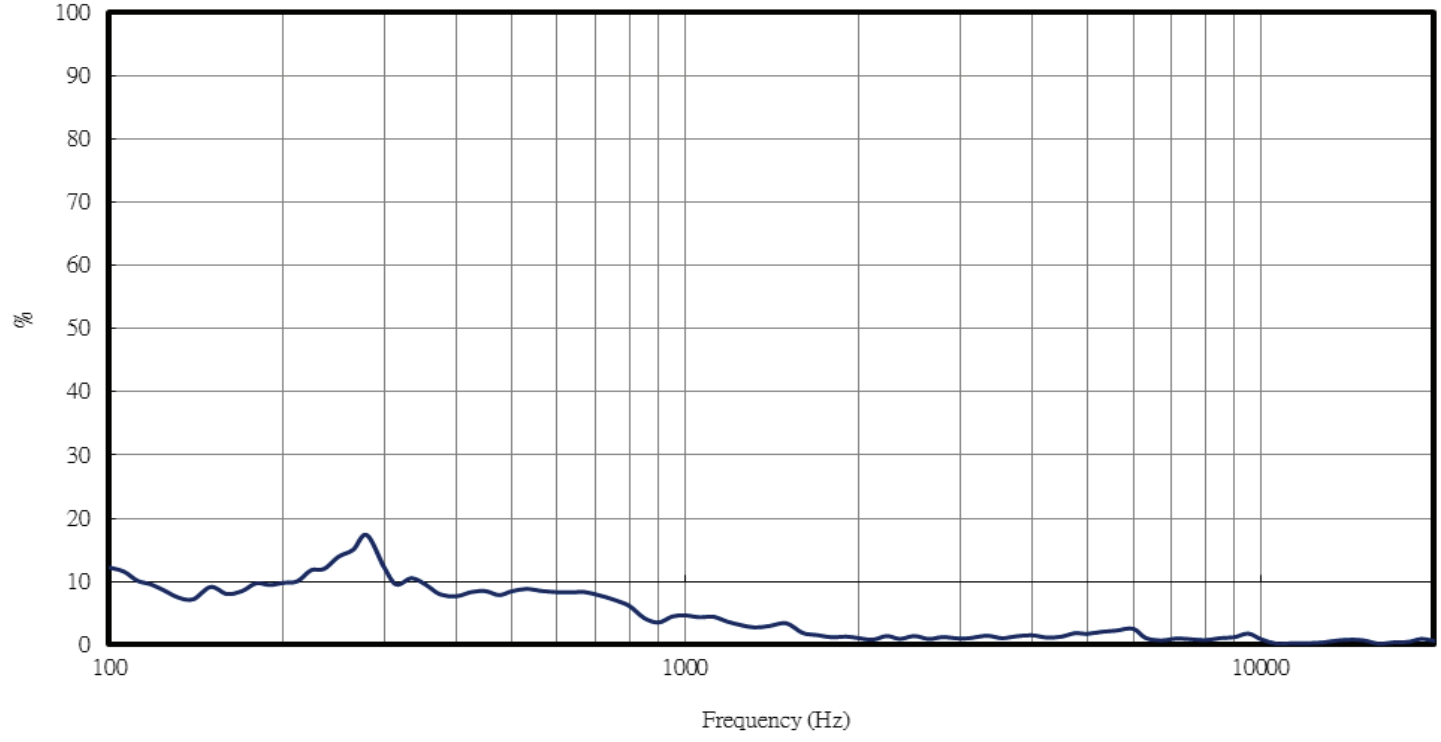
Frequency Response Curve

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



Total Harmonic Distortion Curve

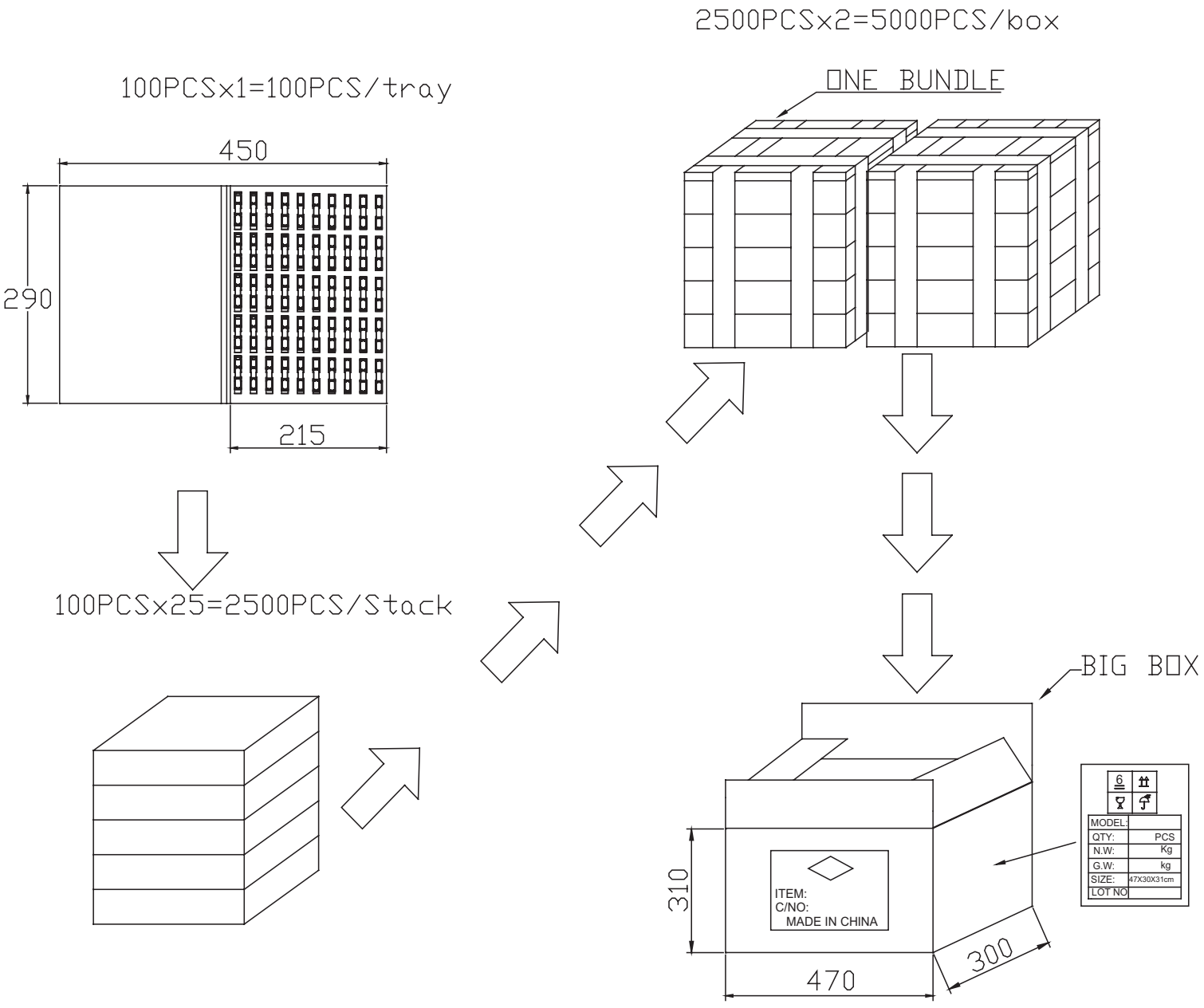
Test Conditions: 2.37 Vrms / 10 cm in 1 cc box



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.

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