

CI44S-15W45-M-1

Rev. 2-2025
RoHS3 & REACH
IEC 60601-1-8 Medical Alarm Compliant*
Speaker Indicators

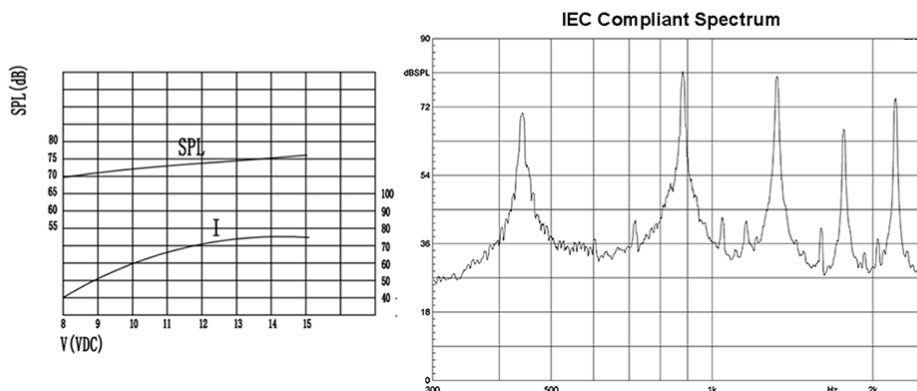

Operating Characteristics

ELECTRICAL

Rated Voltage	10 VDC
Operating Voltage	8 to 15 VDC
Max Current at Vrated	60 mA

ACOUSTIC

Tone Category	Multiple See Control Chart
Description	*See Timing Chart
Center <i>f</i>	450 Hz ± 20 %
Typical Loudness at V Rated	95-110 dB
Control Loudness at V Rated	85 dB
SPL Test Conditions	10 cm



Physical Characteristics

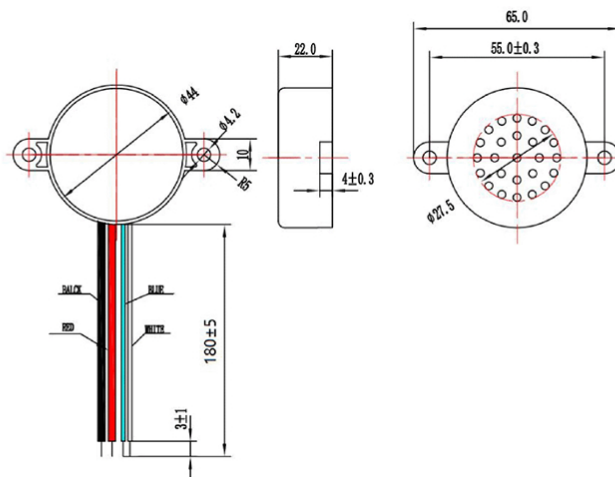
MATERIALS

Housing	Black ABS or PPO
Diaphragm	PET
Wire: Red and Black	UL 1007, 26 AWG
Wire: White and Blue	UL 1571, 28 AWG

TEMPERATURE RANGES

Operating	-20 to +55 °C
Storage	-30 to +70 °C

Weight 26 g



General tolerance = ±0.5 mm and all measurements in mm unless otherwise noted.

Revision	Description	By	Date
1-2025	Updated the SPL value from 65dB at 100cm to 85dB at 10cm as the Control Loudness and included the Typical Loudness as 95-110dB at 10cm.	KG	2025-11-03
2-2025	Removed bolding in "See Control Chart" and replaced "IEC 60601-1-8 compliance is assured by design and not production tested" with "IEC 60601-1-8 compliance and accompanying Timing Chart is assured by design and not production tested" in the footer.	KG	2025-11-17

Warranty: For a period of one (1) year from date of shipping under normal operations conditions. This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair.

The information contained herein is believed to be correct, but no guarantee or warranty, express or implied, with respect to accuracy, completeness or results is extended and no liability is assumed. Challenge Electronics reserves the right to make changes in any specification, data or material contained herein.

*IEC 60601-1-8 compliance and accompanying Timing Chart is assured by design and not production tested.

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Control Chart

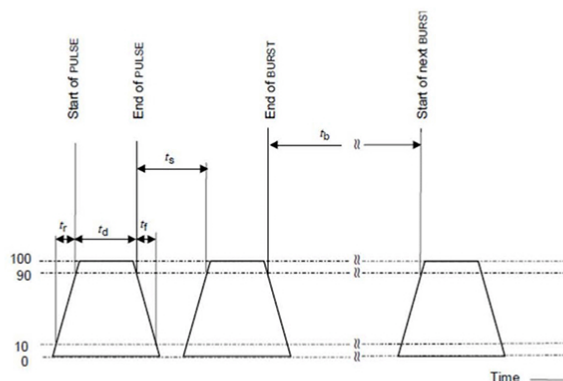
Wire	Low Priority	Medium Priority	High Priority
Black	Negative	Negative	Negative
Red	Positive	Positive	Positive
Blue		High Voltage	
White			High Voltage

High Voltage = 8 - 15 VDC

Timing Chart

Characteristic	High Priority Alarm Signal	Medium Priority Alarm Signal	Low Priority Alarm Signal
Number of Pulses in Burst	10	3	2
Pulse spacing (ts)			
between 1st and 2nd pulse	0.05	0.15	0.13
between 2nd and 3rd pulse	0.05	0.15	Not Applicable
between 3rd and 4th pulse	0.3	Not Applicable	Not Applicable
between 4th and 5th pulse	0.05	Not Applicable	Not Applicable
between 5th and 6th pulse	1	Not Applicable	Not Applicable
between 6th and 7th pulse	0.05	Not Applicable	Not Applicable
between 7th and 8th pulse	0.05	Not Applicable	Not Applicable
between 8th and 9th pulse	0.3	Not Applicable	Not Applicable
between 9th and 10th pulse	0.05	Not Applicable	Not Applicable
Stop Time	10	16	16
Interburst Interval (tb)	13.9	16.9	16.53
Effective Pulse Duration (Td)		0.15	
Rise Time (Tr)		0.025	
Fall Time (Tf)		0.025	

All unites are measured in seconds (s)



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