



Mallory Sonalert Products, Inc.

Part #: **MSR414NSR**

Sales Outline Drawing

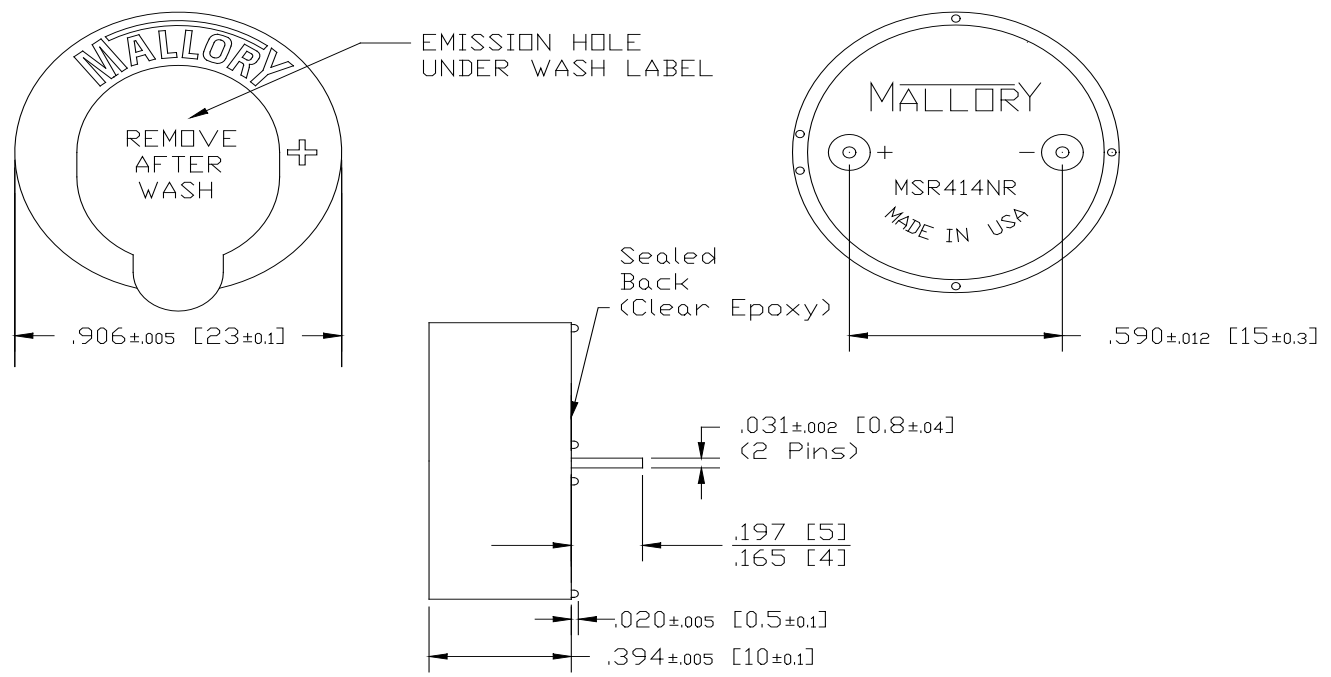
Revision: **C**

Specifications:

Sound Level Category	Loud
Mode of Operation	Continuous
Voltage Rating	4 to 14 VDC
Frequency	3500 ± 500 Hz
Loudness @ 1 FT	88 to 96 dB(A) Typ.
Current Draw	3-12 mA
Housing Material	Valox (UL94V-0), Color Blue
Storage Temperature	-40° to +80°C
Operating Temperature	-40° to +65°C
Weight (Typical)	3.5g
Options	Please contact factory.

Dimensions: Inches (mm)

ROHS Compliant



NOTE A:
TERMINALS - .031" DIA. NICKEL/TIN COATED BRASS.

NOTE B:
MOUNTING- INSERT INTO PRINTED CIRCUIT BOARD AND HAND OR MACHINE SOLDER. UNITS ARE SUITABLE FOR WAVE SOLDERING AND AQUEOUS WASH WHEN THE EMISSION HOLE IS COVERED WITH A WASH LABEL. RECOMMENDED MAXIMUM TEMPERATURE AND TIME DURATION FOR WAVE SOLDERING IS +270°C AND 3 SECONDS RESPECTIVELY.

NOTE C:
PART NUMBER - FOR SEALED MODELS WHICH INCLUDE A WASH LABEL, THE PART NUMBER ENDS WITH THE SUFFIX "SR". THE LETTER "S" IS FOR ORDERING PURPOSES ONLY AND WILL NOT BE LISTED ON THE PART ITSELF.

Aqueous Wash:

In order to process MSR & MSO Series buzzers through an aqueous wash, the buzzer must have a wash label and be sealed on the back with epoxy. Sealed buzzers have a “SR” suffix in the part number. For example, P/N MSR320SR is sealed and appropriate for aqueous wash. P/N MSR320R is not sealed.

After aqueous wash, the wash label must be removed from the buzzer.

Wave Solder Profile:

Refer to the wave solder machine manufacturer’s recommended wave solder profile. If needed, adjust the maximum time & temperature to 270°C for 3 seconds to process MSR & MSO series buzzers.

Moisture Sensitivity Level (MSL): Level 1 (Unlimited)

Packaging: All parts are bulk packed.

Origin: Made in USA

Sound Level vs Distance:

Sound level decreases as the sound waves travel over distance, so it is important to note the specified distance when comparing sound levels. For example, if a buzzer measures 88 decibels (dB) at 30 cm, then it will measure:

97 dB @ 10 cm

82 dB @ 60 cm

78 dB @ 1 Meter

Mallory Sonalert has developed a tool to help convert sound levels depending on the distance. You can download the tool from our website: <http://www.mallory-sonalert.com/PerformanceCurves/Sound%20Level%20Distance%20Conversion%20Tool.xls>