

The Sonitron Multi-Application buzzers are low cost commercial grade components for large volume applications. The SMA series are designed to meet a wide range of current consumption, voltage, sound pressure, mounting methods, connection, dimensions and packing requirements. The buzzers have a built-in oscillator generating their working frequency. They produce a highly reliable audible tone signal, giving either an extremely clear and penetrating tone or a soft sound for non-aggressive signals.



ADVANTAGES & APPLICATIONS

ADVANTAGES :

- octagonal form
- models with different pin pitches
- light but solid state construction
- little power consumption, especially the extra loud LC-versions
- important voltage range (1,5V to 24V)
- easy mountable
- SMT models with heat resistant label for protection during automatic soldering, packed in trays for automatic placing

APPLICATIONS :

- portable battery operating devices
- audible alarms
- gas detectors
- weighing and measuring equipment
- medical instrumentation
- timers
- control instrumentation and systems
- copiers
- automobiles
- games and toys
- computer peripherals
- cash registers, etc.

SPECIFICATIONS

Model	Sound pressure dB(A) *	Frequency (+/- 15%) Hz	Operating voltage	Operating current	Weight
SMA-24	92 dB(A)	3 kHz	1.5 to 24 Vdc	4.2 mA	4 g
SMA-24L	98 dB(A)	3 kHz	1.5 to 15 Vdc	6.7 mA	4 g
SMAI-24	92 dB(A)	** 3.5 kHz	5 to 24 Vdc	6.2 mA	4 g

* All measurements are made in free air at 21°C, at 30 cm, at 12V. Buzzers soldered on a PCB board dimensions 24 cm x 11 cm.

** SMAI 24: intermittent pulse rate of 5 Hz (at 15 Vdc). All the other models have a continuous tone.

Operating temperature	-20°C to +70°C
Storage temperature	-40°C to +85°C
Life time (at 21°C)	See expected life time curve in addendum
Case material	ABS (UL rating: 94 HB) for pin-versions PPS (UL rating: 94 V0/5V) for SMD-versions
Standard colour of case	Grey

ELECTRICAL PARAMETERS

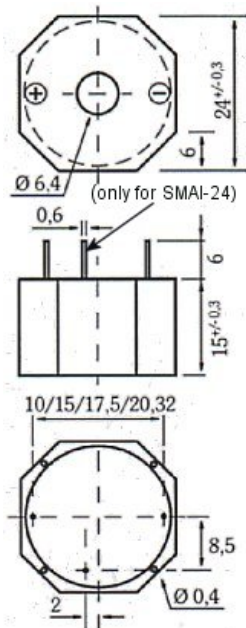
	Sound pressure level vs. operating voltage	Consumption vs. operating voltage
SMA-24 + (I + L version)		

All measurements are made at 30 cm in free air at 21°C.
 ∞: standard versions, respectively SMA-24

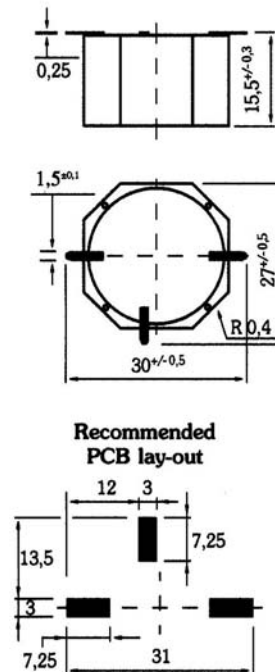
DIMENSIONS (All dimensions are in mm)

SMA 24 (I+ L Version)

Pin version



SMD-version



PRODUCT CODIFICATION

SMA	I	24	L	P10 P15 P 17.5 P 20.32 S
↓	↓	↓		↓
Sonitron Multi-Application	I : Intermittent	Square diameter (mm)	L : Loud	P : Pin distance (in mm) S : SMD terminals

LIST OF AVAILABLE PRODUCT TYPES

Version	Standard (°°)	Loud (L)	Intermittent (I) (*)
SMA-24 serie	SMA-24 P10	SMA-24L P10	SMAI-24 P10
	SMA-24 P15	SMA-24L P15	SMAI-24 P15
	SMA-24 P17.5	SMA-24L P17.5	SMAI-24 P17.5
	SMA-24 P20.32	SMA-24L P20.32	SMAI-24 P20.32
	SMA-24 S	SMA-24L S	SMAI-24 S

(*) When the third pin of the SMAI-24 is left open, the audible signal is intermittent. When the third pin is connected to the (-), the audible signal is continuous.

MODELS ON REQUEST

The SMA series can be delivered, upon special request, with the following protection :

- **Wash tabs**
 A wash tab is glued on the sound emitting hole of the buzzer to protect it from water penetrating into the hole of the cavity. The PCB at the back is also sealed with a silicon film. To order this part, please add WASHTAB to the model number of the SMA series.
- **Acryl coating**
 For applications in aggressive humid conditions, models containing a membrane with a protective coating are available. The protective coating gives a complementary assurance against smog. Add MC to the model number of the SMA series.