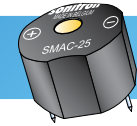


SMAC SERIES



Piezo acoustic components are more and more used in small portable equipment and as a critical alerting device. Reliability must be very high in the most difficult environmental circumstances, such as extreme and varying temperatures, vibrations, shocks, dust conditions, humid environment etc. The SMAC-25 buzzer, manufactured with over 30 years of experience in the field of piezo acoustic technology, is a very stable buzzer with a lifetime of more than 1000 hours in continuous use. In these small dimensions, the SMAC-25 is actually the best available piezo alarm for life supporting systems.



ADVANTAGES & APPLICATIONS

ADVANTAGES :

- Electronics included
- Rounded octagonal shape – new design !
- PCB mounting (pin version)
- Shock, dust & waterproof (IP67)
- Produces a high reliable, clear and penetrating sound
- Light but solid construction
- Low power consumption
- Easily mountable
- Low cost compared to quality

APPLICATIONS :

- Alarms
- Monitoring & test equipment
- Trucks & automobiles
- Boats & airplanes
- Signalization & process control equipment
- Fire detectors
- Battery powered handheld devices
- Gas detectors
- Life support systems
- Control instrumentation & systems
- Intensive care systems

SPECIFICATIONS



Model	Function	Sound pressure level (dB(A)(±2dB(A))	Frequency (Hz)(±15%)	Operating voltage (Vdc)	Operating DCcurrent(mA)
SMAC-25	continuous	93.5	3350	5-16 Vdc	9.7
SMACI-25	intermittent*	93.5	3350	5-16 Vdc	9.7
SMAC-25L	continuous	100	3350	5-35 Vdc	17
SMACT-25	transducer	see graph	see graph	-	-



Capacitance (+/-30%) nF	Operating voltage (VAC pp)
20nF	0 to 30

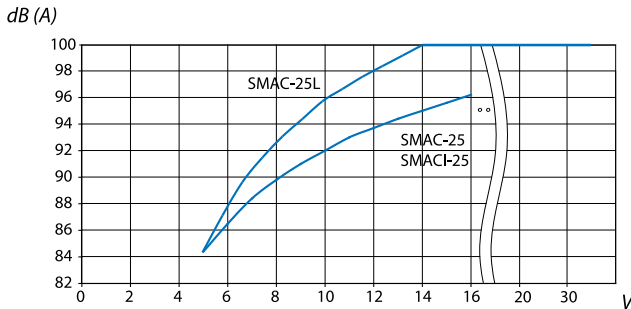
* Pulse rate 1 Hz (+/-15%)

Operating temperature:	-40°C to +85°C
Storage temperature:	-40°C to +85°C
Expected life time:	>1000 hours @ 21°C @ 12 Vdc (free air) mounted on print
Color:	grey, black
Terminals:	pins (tinned brass)
Case material:	PBT (UL rating: 94 HB)
Weight:	7.8 - 8.5 g

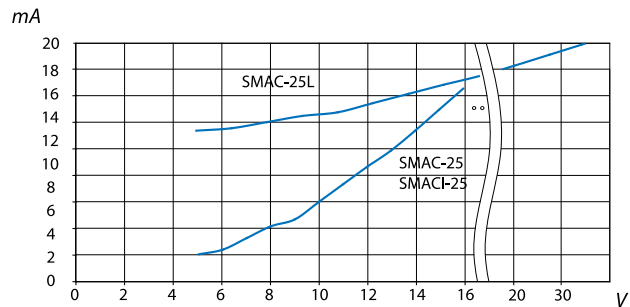
* All measurements are made in free air @ 21°C @ 30 cm @ 12 Vdc.
The test buzzer is soldered on a PCB board with dimensions of 24 cm x 11 cm.

ELECTRICAL PARAMETERS

Sound pressure level vs. operating voltage

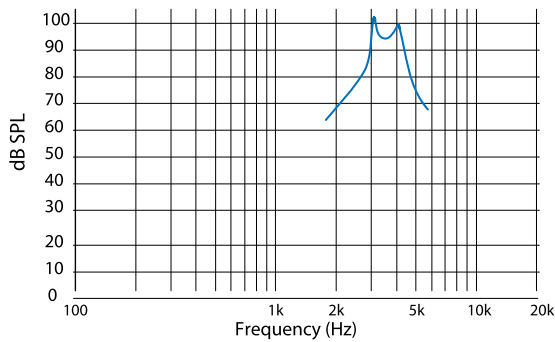


Current consumption vs. operating voltage

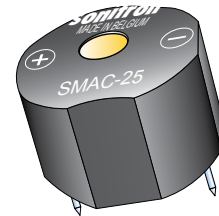


TRANSDUCER: SMAC-25

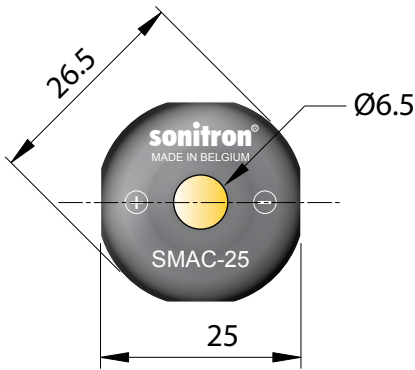
Maximum sound pressure vs. frequency



Peak hold frequency sweep from 1kHz to 4kHz with a square wave signal of 30 Vpp, distance 30cm. (precision of frequency: +/-10%)

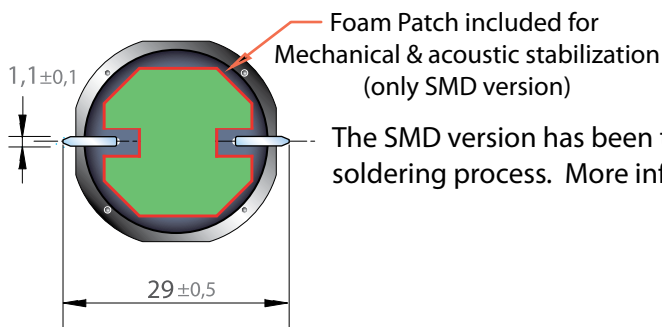
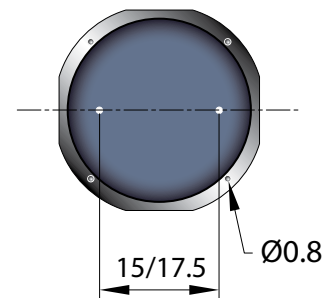
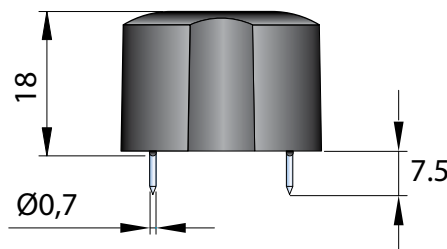


DIMENSIONS (All dimensions are in mm)



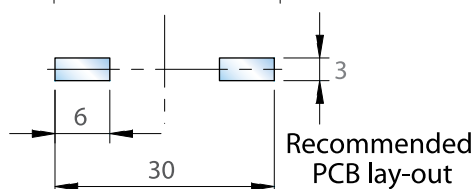
Pin material: tinned brass
Case material: grey or black PBT

Tolerance: +/-0.2 mm

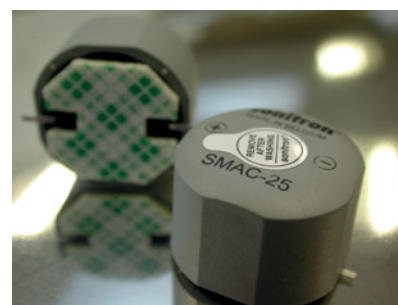


Foam Patch included for Mechanical & acoustic stabilization (only SMD version)

The SMD version has been tested in production with a low temperature reflow soldering process. More information and machine profile, see page 141.



Recommended PCB lay-out



PRODUCT CODIFICATION

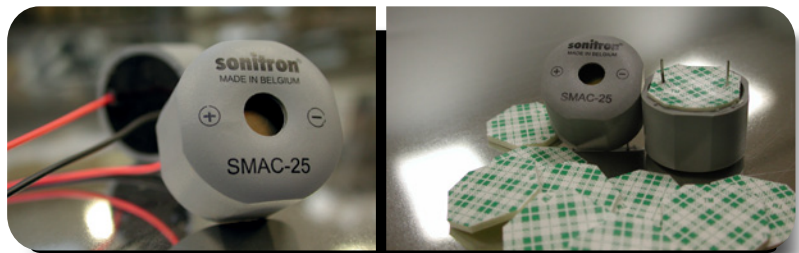
SMAC	I -	25	L	P-S-W connections
Sonitron Multi Application Cup	Intermittent	Square diameter (mm)	Loud	P15 : pin distance 15 mm P17.5 : pin distance 17.5 mm S : SMD terminals W100 : 2 wires length 10cm
	T - Transducer			

LIST OF AVAILABLE PRODUCT TYPES

SMAC-25-P15	SMACI-25-P15	SMAC-25L-P15	SMACT-25-P15
SMAC-25-P17.5	SMACI-25-P17.5	SMAC-25L-P17.5	SMACT-25-P17.5
SMAC-25-S	SMACI-25-S	SMAC-25L-S	SMACT-25-S
SMAC-25-W100	SMACI-25-W100	SMAC-25L-W100	SMACT-25-W100

PRODUCT OPTIONS

Option Code	example	Description
MC	SMAC-25-P15- MC	Acryl coating: The protective coating gives a complementary assurance against smog. All Smac series buzzers are perfectly waterproof (IP67) without the mentioned coating.
Wash Tab	SMAC-25-P17.5 +Wash Tab	Recommended for automatic washing production process. The Wash Tab is upon the sound-emitting hole, avoiding liquid penetration into the cavity. TO BE REMOVED AFTER the washing process for good sound output!!!
FP21	SMACI-25-P15- FP	Acoustic stabilization Foam Patch, easy to stick. For: SMAC(I)-25-P15 SMAC(I)-25-P17.5



PACKAGING

The SMAC-25 buzzers are packed on a polystyrene board (245 L x 245 W) and sold in boxes with dimensions of 250 L x 250 W x 125 H.

SMAC-25	
per board	81
per box	(5x81) 405