



Elektrotechnik Karl-Heinz Mauz GmbH

SMD-P09A03 (Artikel-Nr. 220070)

EKULIT

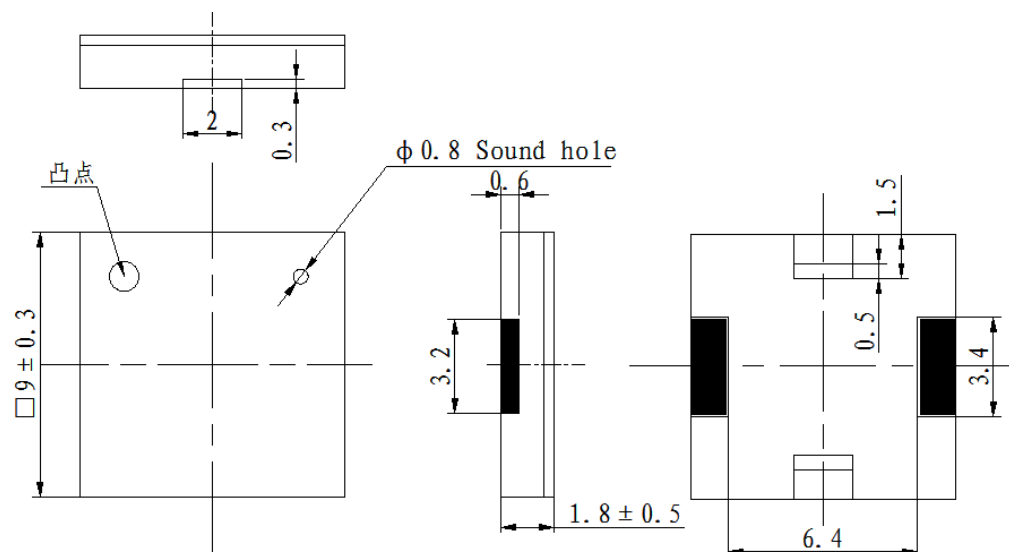
SPECIFICATIONS:

TYPE	UNIT	SMD-P09A03
Min. Sound Output at 10cm	dB	65
Rated Voltage	V _{p-p}	3
Max Input Voltage	V _{p-p}	25
Resonant Frequency	Hz	4000±500
◆ Rated current	mA	<3
Capacitance	pf	12.000 ± 30%
Operating Temperature	°C	-40 ~ +85
Storage Temperature	°C	-40 ~ +85
Weight	g	0.25
Housing Material		LCP

◆ applying rated voltage (resonant frequency, square wave)

DIMENSIONS :

(Unit: mm)



Adresse: **Felix-Wankel-Str. 35 • 73760 Ostfildern/Nellingen**

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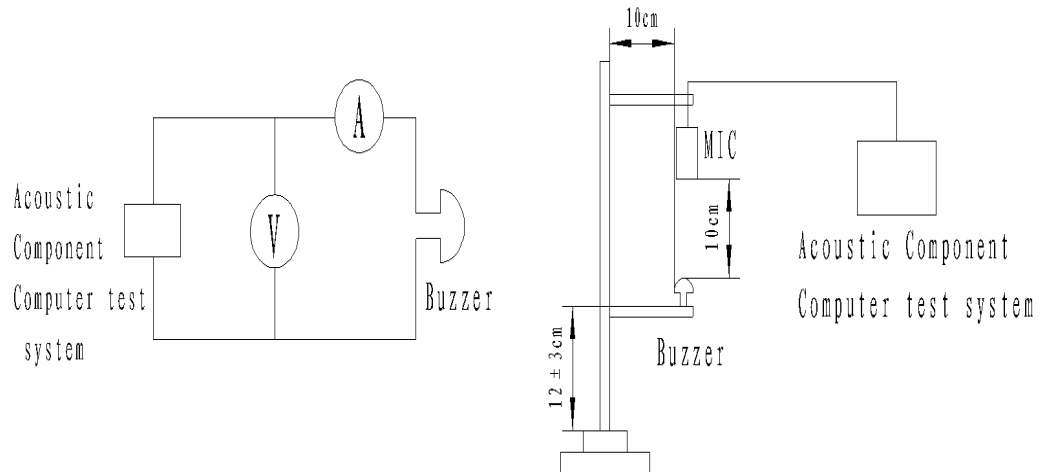
Fax: **+49-711/3414024**

E-mail: **info@ekulit.de**

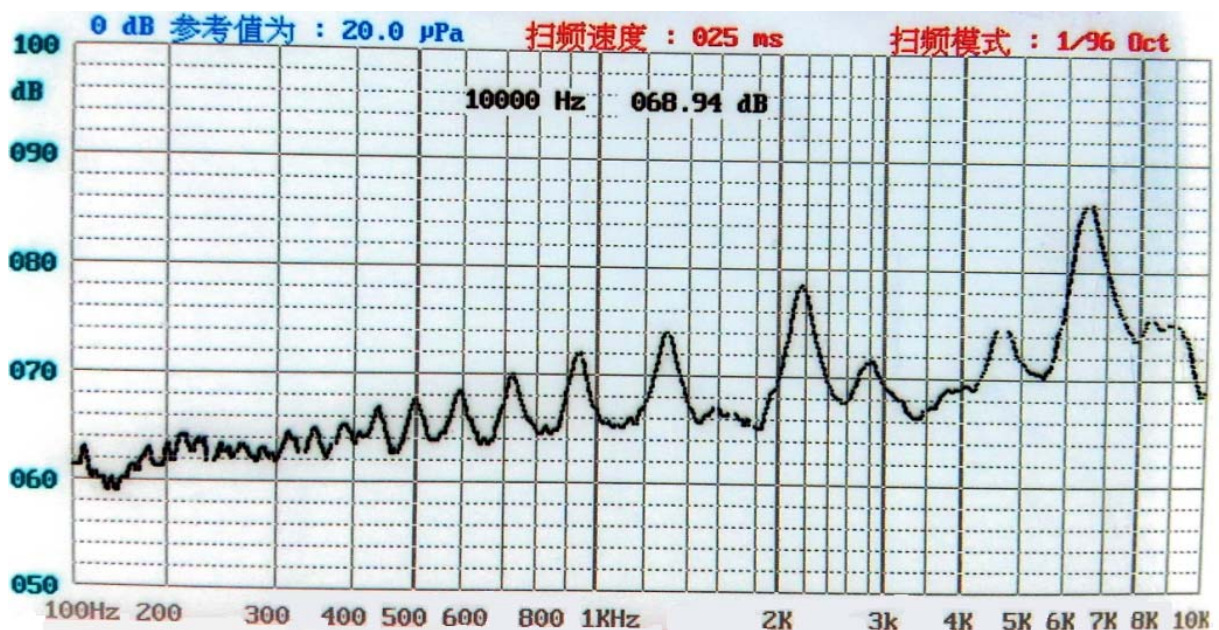
Web site: **www.EKULIT.de**

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Test methode:



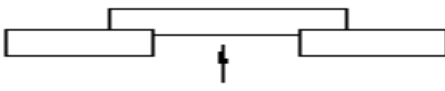
Frequency response:





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Reliably test:

NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +80°C for 120 hours	All specifications must be satisfied after the test.
2	Low temp. storage life	The part shall be capable of withstanding a storage temperature is -30°C for 120 hours	
3	Temp. Cycle	Total 5 cycles, 1 cycle consisting of -30±2°C, 30 minutes 20±5°C 15 minutes 80±2°C, 30 minutes 20±5°C 15 minutes	
4	Humidity Test	40±2°C, 90~95% RH, 120 hours	
5	Vibration Test	The part shall be subjected to a vibration cycle is 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm(9.3g). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.	
6	Shock	Sounder shall be measured after being applied shock (980m/s ²) for each three mutually perpendicular directions to each of 3 times by half sine wave.	
7	Drop Test	Dropped naturally from 700mm height onto the surface of 10mm thick wooden board. 2 directions-upper and side of the part are to be applied.	
8	Lead pull	The part shall be pushed with a force of 9.8N for 10±1 seconds behind the part. 	After the test part shall meet specifications without any degradation in appearance and performance.
9	Solder heat resistance	The part leads (pins) shall be immersed in molten solder maintained at 250±10°C for a period of 30 seconds.	After the test part shall meet specifications without any degradation in appearance and performance.
10	Recommended temp. Profile for Reflow Oven	Shown in Fig.1	

Warranty: For a period of one year from date of manufacture under normal operations.

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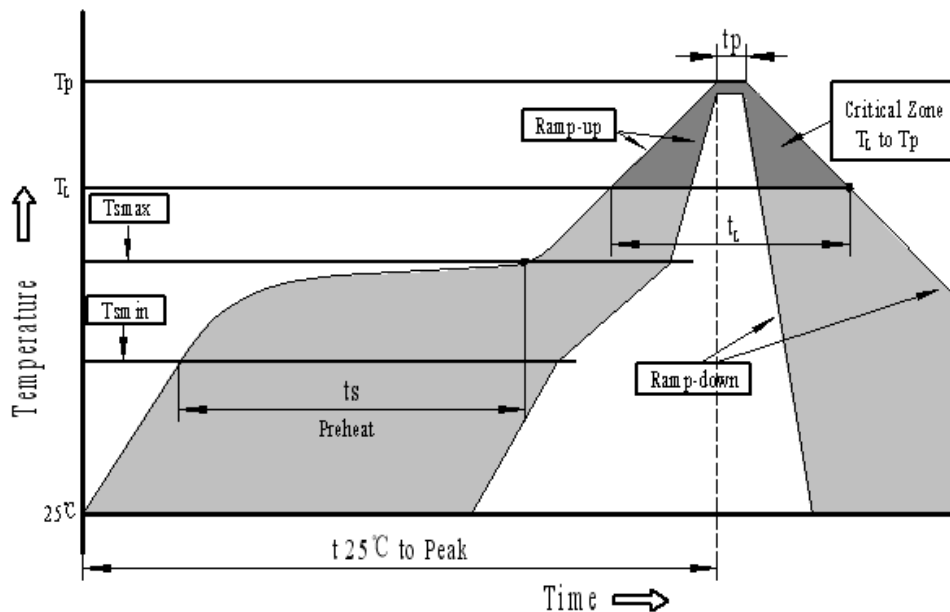
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Recommended Temp. Profile for Reflow Oven (Fig.1)



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to T_p)	3°C/second max.
Preheat	
-Temperature Min.(T_{smin})	150°C
-Temperature Min.(T_{smax})	200°C
-Temperature Min.(t_s)	60~180 seconds
T_{smax} to T_L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature(T_L)	217°C
-Time(T_L)	60~150 seconds
Peak temperature(T_p)	245°C+0/-5°C
Time within 5°C of actual Peak temperature (t_p)	6 seconds max.
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.