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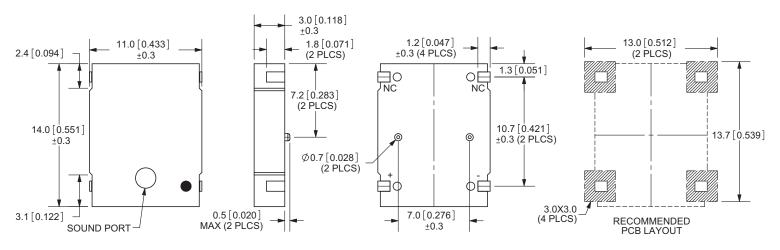
PART NUMBER: CSS-H5B43

DESCRIPTION: MAGNETIC BUZZER

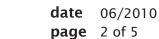
SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
rated voltage			5		V o-p
operating voltage		4		6	V o-p
current consumption	at rated voltage, 2,730 Hz square wave, ½ duty			60	mA
coil resistance		37.9	43	48.1	Ω
sound output	at 10 cm (A-weight free air), rated voltage, 2,730 Hz square wave, ½ duty	91			dBA
rated frequency			2,730		Hz
operating temperature		-30		85	°C
storage temperature		-40		85	°C
dimenstions	14 x 11 x 3 mm (L x W x H)				
weight				1	g
material	L.C.P. (black)				
terminal	SMD type (Sn plating)				
RoHS	yes				

APPEARANCE DRAWING



TOLERANCE: ±0.5mm UNLESS OTHERWISE SPECIFIED

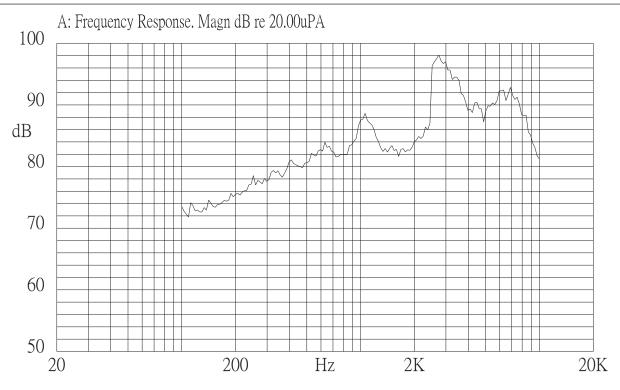




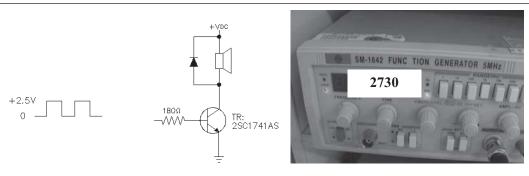
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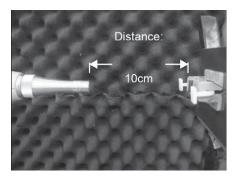
DESCRIPTION: MAGNETIC BUZZER

FREQUENCY RESPONSE CURVE



MEASUREMENT METHOD







20050 SW 112th Ave. Tualatin, Oregon 97062 phone 503.61



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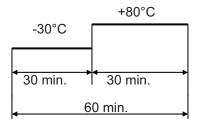
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MECHANICAL CHARACTERISTICS

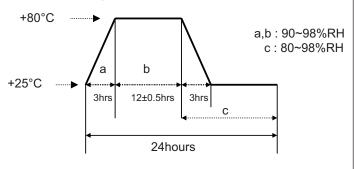
item test condition		evaluation standard	
soldering	Lead terminals are immersed in a solder bath of $\pm 270 \pm 5^{\circ}$ C for 3 ± 1 seconds.	95% of the lead pads will be wet with solder.	
soldering heat resistance	The buzzer will follow the reflow temperature curve to test its reflow thermo stability.	No interference in operation.	
terminal mechanical strength	For 10 seconds, the force of 9.8 N (1.0 kg) is applied from behind the part which will be soldered onto the PC Board.	No damage or cutting off	
vibration test	The buzzer should be measured after a vibration amplitude of 1.5 mm with $10 \sim 55$ Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	After any tests, the buzzer will meet specifications without any damage in appearance and the SPL should be within ±10 dBA of the initial measurements.	
drop test	The buzzer without packaging is subjected to 3 drops on each axis from the height of 75 cm onto a 40 mm thick wooden board.		

ENVIRONMENT TEST

item	test condition	evaluation standard
high temperature test	After being placed in a chamber at +80°C for 96 hours.	
low temperature test	After being placed in a chamber at -30°C for 96 hours.	
thermal shock test	The part will be subjected to 10 cycles. One cycle will consist of:	



temperature cycle test The part will be subjected to 10 cycles. One cycle will consist of:



After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After 4 hours at 25°C, SPL should be within ±10 dBA of the initial measurements.



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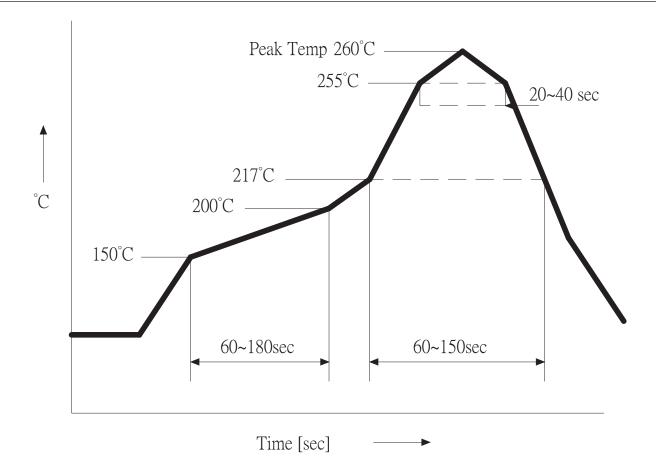
RELIABILITY TEST

item	test condition	evaluation standard
operating (life test)	 Continuous life test: The part will be subjected to 72 hours of continuous operation at 	After any tests, the buzzer will meet
	55°C with 5 V o-p, 2,730 Hz applied.	specifications without any damage in appearance except SPL. After
	2. Intermittent life test:	4 hours at 25°C, SPL should be within
	A duty cycle of 1 minute on, 1 minute off, a minimum of 10,000 times at room temp $(+25 \pm 10^{\circ}\text{C})$ with 5 V o-p, 2,730 Hz applied.	±10 dBA of the initial measurements.

TEST CONDITIONS

standard test conditions	a) Temperature: +5 ~ +35°C	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: +25 ±2°C	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar

RECOMMENDED TEMPERATURE PROFILE FOR REFLOW OVEN





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PACKAGING

