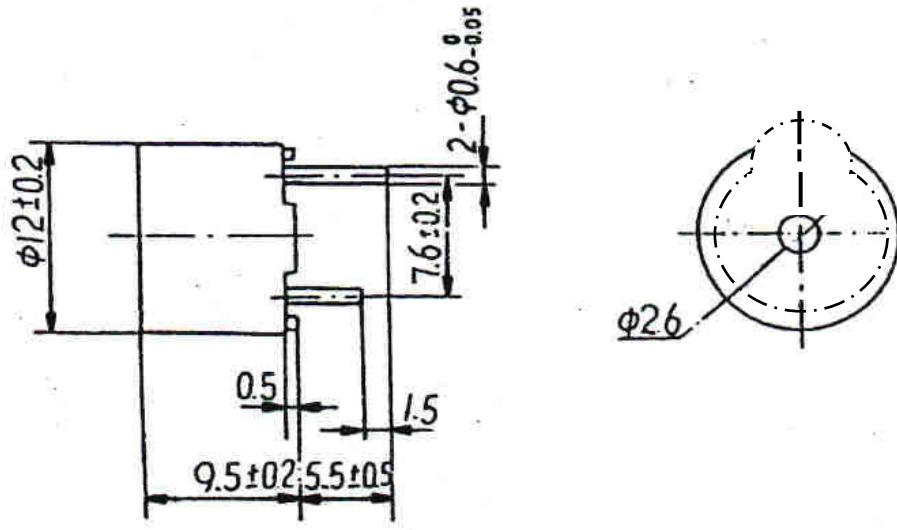


# F/TCW05 LF

## Technical terms Technische Daten

Rated Voltage <i>Nennspannung</i>	5V
Operating voltage <i>Betriebsspannungsbereich</i>	4...6.5V
a) Rated Current <i>Nennstrom</i>	$\leq 30\text{mA}$
a) Sound Output [SPL]at 10 cm <i>Schalldruckpegel] in 10 cm</i>	$\geq 85\text{dB}$
a) Resonant Frequency <i>Resonanzfrequenz</i>	$2300 \pm 300\text{Hz}$
b) Response time <i>Anschwingzeit</i>	$\leq 50\text{msec}$
Operating Temperature <i>Betriebs-Temperatur</i>	-40 ...+85 °C
Storage Temperature <i>Lagerungs-Temperatur</i>	-40 ...+85 °C
Inductance <i>Induktivität</i>	$3.6 \pm 0.5\text{mH}$
Weight <i>Gewicht</i>	2g
Polarity <i>Polarität</i>	marked by a plus sign on the housing Markiert mit einem Plus Zeichen am Gehäuse.
a) Value applying rated voltage (DC) <i>Wert bei angelegter Nennspannung (DC)</i>	
b) Value applying minimum operating voltage (DC) <i>Wert bei angelegter minimaler Betriebsspannung (DC)</i>	

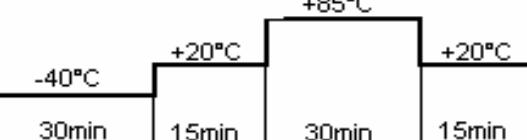
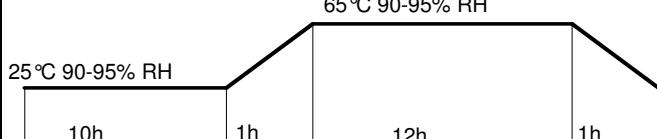
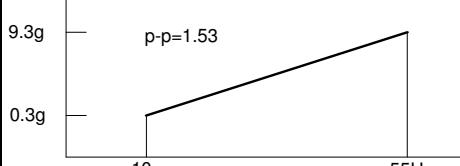
## Drawings Zeichnungen



DIGISOUND			Halbzeug, Werkstoff			Untolerierte Maße	Zeichn.-Nr.
						Maßstab	Ersatz f. Zeichn.
Vervielfält.-Pause Nr.							Page Blatt 1 of von 3
Arbeitspause Nr.							
gezeichnet		Tag	Name	And. zust.	And.-Mittlg. Nr.	Tag	Name
bearbeitet		26.01.05	FM	1	Reliability	17.03.05	FM
geprüft				2	Wave	02.03.06	FM
normgepr.							

F/TCW05 LF

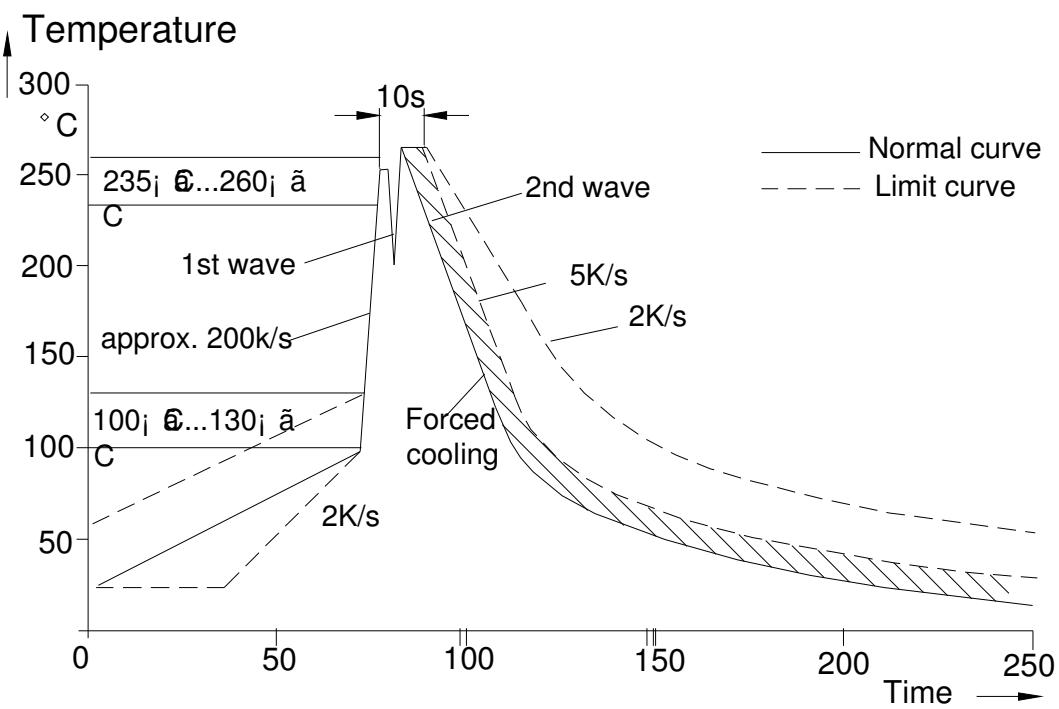
## **Reliability Zuverlässigkeit**

Item	Method of test	Standard
Storage in high temperature	Storage in +85°C test box for 96hours, then expose to the room temperature for 2hours without applying power.	All specifications must be satisfied in this condition.
Storage in low temperature	Storage in -40°C test box for 96hours, then expose to the room temperature for 2hours without applying power.	All specifications must be satisfied in this condition.
Life test in room temperature	Operate continuously for 1000 hours with applying rated voltage.	All specifications must be satisfied in this condition.
Life test in high temperature	Operate continuously in +85°C for 500hours applying 6.5V.	All specifications must be satisfied in this condition.
Life test in low temperature	Operate continuously in -40°C for 500hours applying 4V.	All specifications must be satisfied in this condition.
Temperature cycle test	 <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>	All specifications must be satisfied in this condition.
Humidity cycle test	 <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>	All specifications must be satisfied in this condition.
Vibration test	 <p>Make this test for the directions X,Y and Z for 30minutes each. To- and -fro sweep time is 1min.</p>	All specifications must be satisfied in this condition.
Drop test	Drop a buzzer naturally from the height of 700mm to the surface of 10 mm thick woodenboard. Three directions (X,Y & Z)	All specifications must be satisfied in this condition.
Solderability	Temperature: $245 \pm 5^\circ\text{C}$ Duration: 3 sec After test minimum 95% coverage of surface	All specifications must be satisfied in this condition.
Resistance against solder-heat	Pins: No deterioration after dipping in solder $265 \pm 5^\circ\text{C}$ for 10sec. Housing: Maximum temperature on housing: $110^\circ\text{C}$	All specifications must be satisfied in this condition
Pin Strengtht	Each Pin may withstand against pulling force of 1kg for 30seconds	All specifications must be satisfied in this condition

Diese Zeichnung ist unser Eigentum. Vervielfältigung unbefugte Verwertung, Mitteilung an andere ist strafbar und schadensersatzpflichtig

## Soldering condition *Lötbedingung*

## Wave soldering Schwallöten:



Diese Zeichnung ist unser Eigentum. Vervielfältigung unbefugte Verwertung, Mitteilung an andere ist strafbar und schadensersatzpflichtig

DIGISOUND			Halbzeug, Werkstoff				Untolerierte Maße	Zeichn.-Nr.
							Maßstab	
							Ersatz f. Zeichn.	
	Tag	Name	And. zust.	And.-Mittig. Nr.	Tag	Name	F/TCW05 LF	
gezeichnet			1	Reliability	17.03.05	FM		
bearbeitet	26.01.05	FM	2	Wave	02.03.06	FM		
geprüft								
normgepr.								