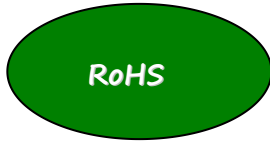


**P/N: WTL6R22559**  
**Ceramic Resonator ZTB Type**



Customer	WTL
	Approved by: Xoxo Lee
	Checked by: Susan He
	Issued by: Sheryl Xia

SPECIFICATION

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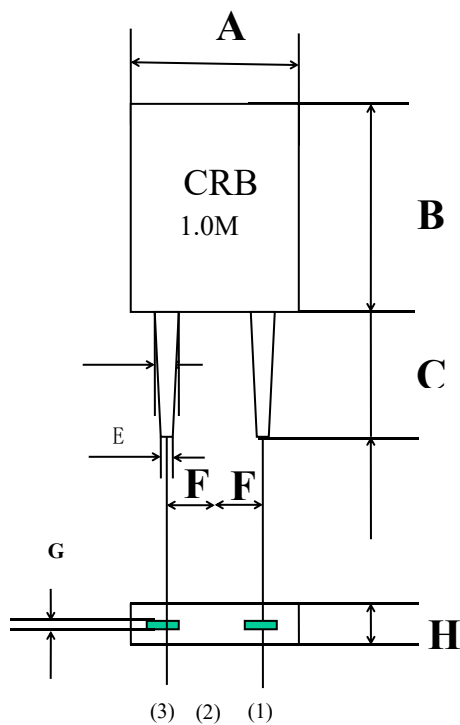


1. SCOPE

This specification is applied to the ceramics resonator used for communication.

2. MODEL NAME : WTL6R22559

3. DIMENSIONS



UNIT : MM

A	5.1±0.3
B	6.3±0.3
C	4.5±0.5
D	0.9±0.1
E	0.7±0.1
F	1.25±0.2
G	0.15±0.03
H	2.3±0.3

(1). INPUT

(2). GROUND

(3). OUTPUT

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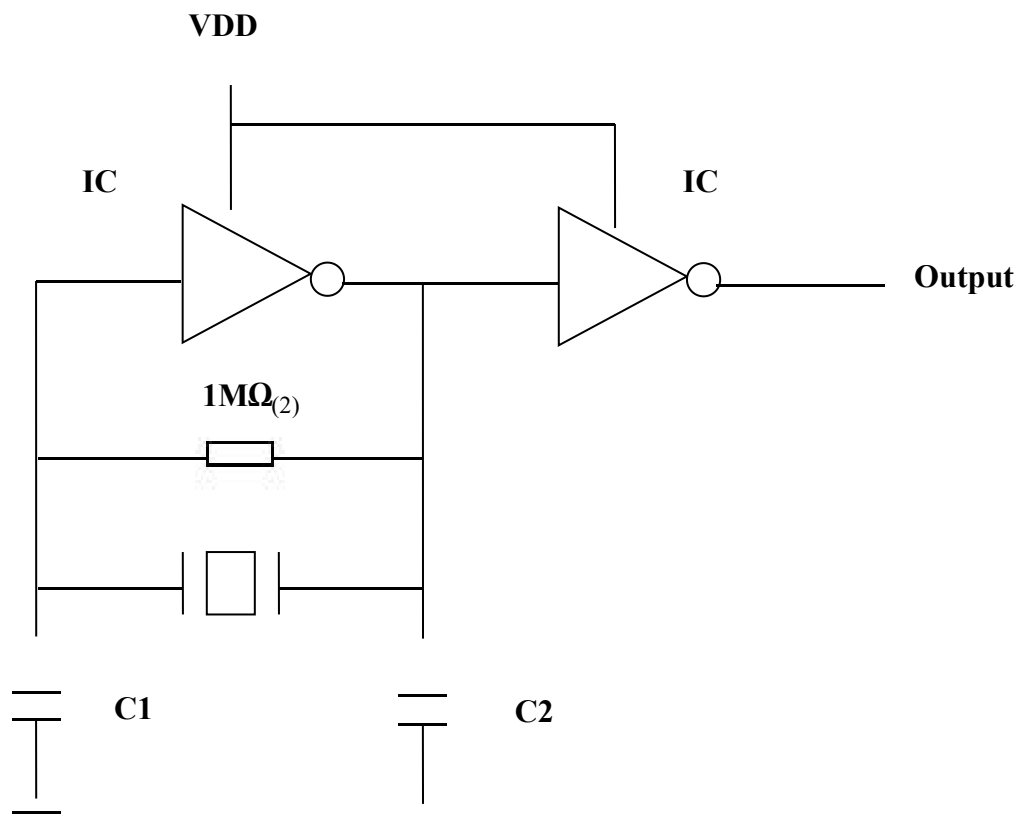


4.ELECTRICAL CHARACTERISTICS

Item	Requirements	
4-1	Center Frequency( $f_0$ )	1000KHz
4-2	Frequency Accuracy	$F_c \pm 0.5\%KHZ$
4-3	Resonator Impedance	100 $\Omega$ max
4-4	Operating Temperature Range	-20 TO +80 °C
4-5	Storage Temperature Range	-30 TO +85 °C
4-6	Withstanding Voltage	DC 100
4-7	Temperature Coefficient Of Center Frequency (-20~+80°C)	$\pm 0.3\%$ max
4-8	Insulation Impedance	100 M $\Omega$ min
4-9	Shunt Capacitance	85 $\pm$ 20 PF

### 5. TEST CIRCUIT

Parts shall be measured under a condition (Temp.:3~35°C. Hum.:45~85%) unless any necessity to measure under a standard condition (Temp.:20 ± 2 °C . Humid.:65 ± 5%) is occurred.



**C1=C2=100PF**

**IC= 1/6CD4069UBE**

**VDD=+5V**

**6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS**

	Test Item	Condition of Test	Requirements
6-1	Lead Strength Lead Pulling Lead Bending	Applied to vertical weight 1Kg along with the direction of lead without any shock for 5-10sec.  Filter lead shall be subjected to withstand against 90 ° bending its stem.This operation shall be done toward both direction.	No mechanical damage and the measured values shall meet Item 5.
6-2	Solderability	Dip the terminals of the filter no closer than 1.5mm into a soldering bath(230±5 °C ) for 5±1 sec . (refer to MIL-STD-202E-208C)	The solder shall be for coat at least 95% of the terminal surface
6-3	Vibration	Filter shall be measured after being applied vibration as below Vibration Freq: 10-55HZ Amplitude : 1.5 mm Directions : 3 axial directions Time : 1 hour/each direction	No visible damage and the measured value shall meet table 1
6-4	Random Drop	Filter shall be measured after 3 times random dropping from the height of 76 c m.concrete floor.	
6-5	Resistance to Soldering Heat	Filter immersing the terminals up to 1.5 mm to filter's body in soldering bath (350 ±10 °C ) for 3 sec., filter shall be measure after being placed in natural condition for 1 hour.	The measured value shall meet table 1.
6-6	Humidity	After being placed in a chamber (Humic, :90-95% RH Temp.:40 + 2 °C ) for 100 hours filter shall be measured after placed in natural condition for 1 hour	
6-7	Life Test (High temperature)	After being placed in a chamber 85+2 °C for 100 hours ,filter shall be measured after being placed in natural condition for 1 hour.	

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6-8	Life Test (Low temperature)	Placed in a chamber (Temp:-55+2 °C ) for 100 hours,filter shall be measured placed in natural condition for 1 hour .	The measured value shall meet Table 1.
6-9	Thermal Shock	After temperature cycling of -55 °C (30 minutes ) to +85 °C ( 30 minutes ) was performed 5 times with a transfer time15 min filter shall be measured after being placed in natural condition for 1 hour.	

**7. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS**

Table

Item	Limit Value
Center Frequency	$\pm 1.0$ kHz max

※ Note: The limits in the above table are referenced to the initial Measurements.

**8. NOTICE**

- 8.1 Ceramic filter should be stored in storeroom .And the surrounding atmosphere is acidness,alkali-free and no other harmful impurity.
- 8.2 The package for ceramic filter should be avoid the hit by rain and Snow,also the mechanical damage.
- 8.3 This specification limits the quality of the component as a single unit .Please make sure that the component is evaluated and confirmed the drawing When it is mounted to your product.