

P/N: WTL6R20897
Ceramic Resonator ZTB DIP Type



1. SCOPE

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

(本规格书适用于通信用陶瓷谐振器。)

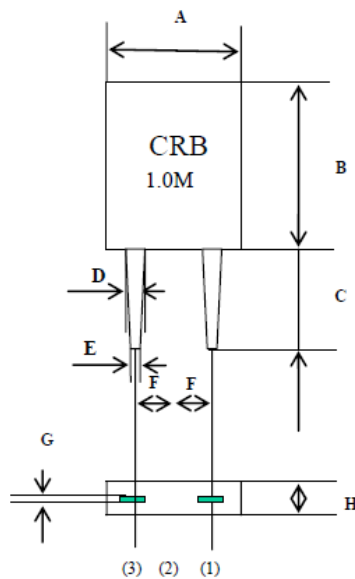
2. MODEL NAME

(产品名称)

| Part Name (型号) | Customer's Part Number (客户型号) | Drawing No. (图号) |
|-------------------|----------------------------------|---------------------|
| CRB1.0M | | GG-010 |

3. DIMENSIONS

(尺寸)



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

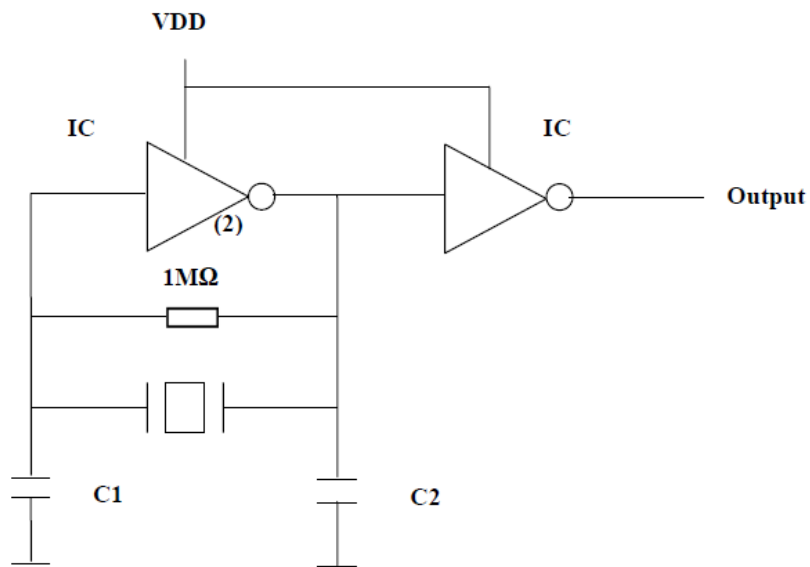
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4. TEST CIRCUIT
(测试电路)

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.

(测量条件为温度 3~35°C, 相对湿度 45~85%, 必要时标准测量条件为温度 20 ± 2°C, 相对湿度 65 ± 5%)



C1=C2=100PF

IC= 1/6CD4069UBE

VDD=+5V

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5. ELECTRICAL CHARACTERISTICS
 (电气性能)

| | Item (项目) | Requirements (要求) |
|-----|--------------------------------------------------------------|-----------------------------|
| 5-1 | Center Frequency (fo) (中心频率) | 1000KHZ |
| 5-2 | Frequency Accuracy (频率精度) | Fc±0.5%KHZ |
| 5-3 | Resonator Impedance (谐振阻抗) | 100 Ω max |
| 5-4 | Operating Temperature Range (使用温度) | -40 TO +80 °C |
| 5-5 | Storage Temperature Range (储存温度) | -30 TO +85 °C |
| 5-6 | Withstanding Voltage (耐电压) | DC 100 |
| 5-8 | Temperature Coefficient Of Center Frequency | ±0.3% max |
| | (-20~+80°C) | |

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6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS
 (物理及环境特性)

| | Test Item (试验项目) | Condition of Test (试验条件) | Requirements (要求) |
|-----|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 6-1 | Lead Strength (引脚强度) Lead Pulling (引脚拉力) Lead Bending (引脚弯曲) | Applied to vertical weight 1Kg along with the direction of lead without any shock for 5-10sec. (沿引线方向加 10 牛顿静载荷 5-10 秒.) Filter lead shall be subjected to withstand against 90° bending its stem.This operation shall be done toward both direction. (引脚折弯 90° ,反方向同样。) | No mechanical damage and the measured values shall meet Item 5. (无机械损伤, 测量值足第 5 款要求.) |
| 6-2 | Solderability (可焊性) | 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) (端子至少 1.5mm 应浸没在 (230±5°C) 锡池内 5+1 秒。) | The solder shall be for coat at least 95% of the terminal surface (端子表面 95%被浸润) |
| 6-3 | Vibration (振动) | Filter shall be measured after being applied vibration as below (在下面条件下振动后测试) Vibration Freq: 10-55HZ (振动频率) Amplitude : 1.5 mm (幅度) Directions : 3 axial directions (方向) (3 轴向) Time : 1 hour/each direction (时间) (1 小时/各方向) | No visible damage and the measured value shall meet table 1 (无可见损伤且测量值满足表 1) |
| 6-4 | Random Drop (任意跌落) | Filter shall be measured after 3 times random dropping from the height of 76cm. concrete floor. (3 次 76 c m 高度跌落到水泥地板后测试) | |
| 6-5 | Resistance to Soldering Heat (耐焊接热) | 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. (端子在 (350±10°C) 锡池内浸没到器件根部 1.5mm,, 时间 3 秒, 自然条件放置 1 小时后测试。) | The measured value shall meet table 1. (测量值满足表 1) |

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6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS (续上页)
 (物理及环境特性)

| | Test Item (试验项目) | Condition of Test (试验条件) | Requirements (要求) |
|------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 6-7 | Humidity (湿度) | After being placed in a chamber (Humid, :90-95% RH Temp.:40 ± 2°C) for 100 hours filter shall be measured after placed in natural condition for 1 hour (相对湿度 90-95% 温度 40 ± 2°C 容器中放置 100 小时, 自然条件放置 1 小时后测试。) | The measured value shall meet Table 1. (测量值应满足表 1) |
| 6-8 | Life Test (High temperature) (寿命试验) (高温) | 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. (温度 85± 2°C 容器中放置 100 小时, 自然条件放置 1 小时后测试。) | |
| 6-9 | Life Test (Low temperature) (寿命试验) (低温) | Placed in a chamber (Temp:-55± 2°C) for 100 hours,filter shall be measured placed in natural condition for 1 hour . (温度-55±2°C 容器中放置 100 小时, 自然条件放置 1 小时后测试。) | |
| 6-10 | Thermal Shock (温度冲击) | 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. (温度-55°C (30 分钟) 至+85°C (30 分钟) 循环 5 次, 15 分钟 1 次, 自然条件放置 1 小时后测试。) | |

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6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS (续上页)

(物理及环境特性)

Table 1
(表 1)

| Item (项目) | Limit Value (极限值) |
|------------------------------|---------------------------|
| ※ Center Frequency (中心频率) | $\pm 1.0 \text{ kHz max}$ |
| | |
| | |

※ Note: The limits in the above table are referenced to the initial Measurements. (表中的限值参照初始测量值)

7. NOTICE

(注意)

- 7.1 Ceramic filter should be stored in storeroom .And the surrounding atmosphere is acidness,alkali-free and no other harmful impurity.
(器件应贮藏于贮藏室,周围环境无酸、碱性腐蚀或其它有害气体.)
- 7.2 The package for ceramic filter should be avoid the hit by rain and Snow,also the mechanical damage.
(包装应避免风雪、雨水的侵袭以及机械伤害.)
- 7.3 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.
(本规格书只规定了部件本身的质量。应用于您的产品时。请确认图纸该部件是否等效.)