

1. SCOPE

(范围)

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

(本规格书适用于通讯用陶瓷谐振器。)

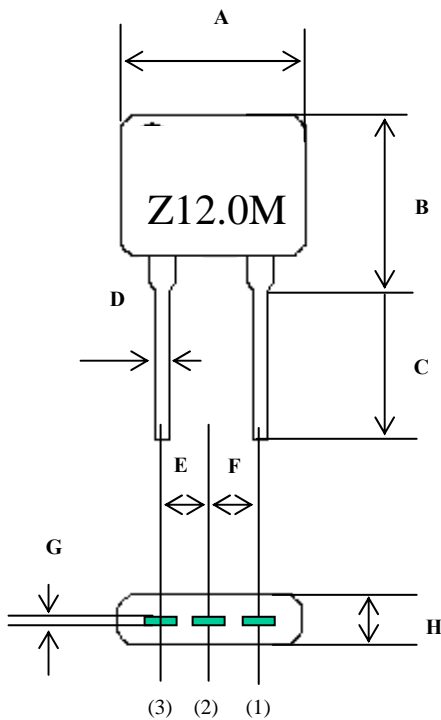
2. MODEL NAME

(产品名称)

Part Name (型号)	Customer's Part Number (客户型号)	Drawing No. (图号)
ZTA12.0MX		GG-024

3. DIMENSIONS

(尺寸)



UNIT : MM

A	8.0MAX
B	8.0MAX
C	5.0±1.0
D	0.6±0.1
E F	2.5±0.3
G	0.25±0.05
H	4.0MAX

- (1). INPUT
- (2). GROUND
- (3). OUTPUT

5. ELECTRICAL CHARACTERISTICS

(电气性能)

	Item (项目)	Requirements (要求)
5-1	Center Frequency (fo) (中心频率)	12.00MHZ
5-2	Frequency Accuracy (频率精度)	Fc±0.5%
5-3	Resonator Impedance (谐振阻抗)	25 Ω max
5-4	Build in capacitor (内置电容)	30 P
5-5	Operating Temperature Range (使用温度)	-20 TO +80 °C
5-6	Storage Temperature Range (储存温度)	-30 TO +85 °C
5-7	Withstanding Voltage (耐电压)	DC 100 V
5-8	Temperature Coefficient Of Center Frequency (-20~+80°C)	±0.3% max
5-9	Insulation Impedance (绝缘阻抗)	200 MΩ min

4. TEST CIRCUIT

(测试电路)

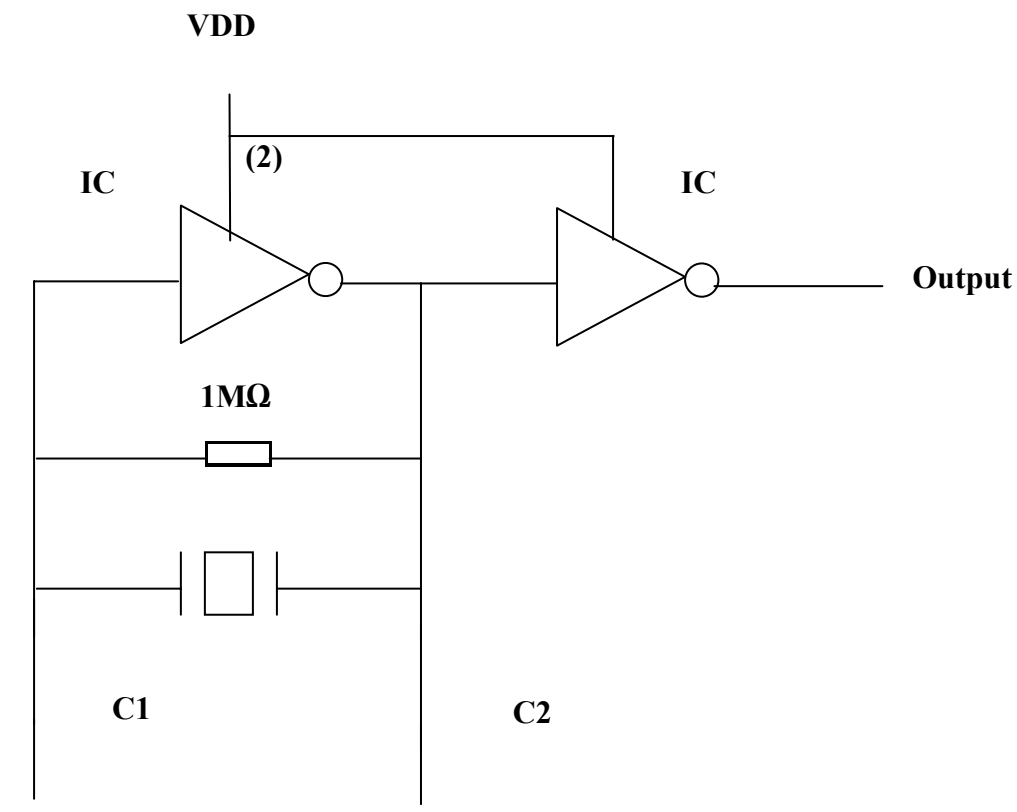
Parts shall be measured under a condition (Temp.:3~35°C. Hum.:45~85%)

unless

any necessity to measure under a standard condition (Temp.:20 ± 2°C.

Humi.: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%)



IC= 1/6CD4069UBE

VDD=+5V

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 diretion. (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。)(端子表面 95%被浸润)	The solder shall be for coat at least 95% of the terminal surface
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 30 cm. concrete floor. (3 次 30 cm 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)

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 (Humi, :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。)	

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)	$\pm 0.5\%$

※ **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)

- 7.2 Ceramic filter should be stored in storeroom .And the surrouding atmosphere is acidless,alkali-free and no other harmful impurity.**
(器件应贮藏在贮藏室, 周围环境无酸、碱性腐蚀或其它有害气体.)
- 7.3 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.)
- 7.4 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.)