

## **Quartz Crystal Metal Can (TH)**



11.2 x 5.0 x 3.5mm Thru-Hole

#### **Product Features**

- Standard: 3.5mm Max height GB Series
- Low profile: 2.5mm Max height GG Series
- AT or BT cut performance
- Resistance weld seal
- Pb-free and RoHS/Green compliant

#### **Product Description**

The GB/GG Series is a miniature, AT or BT cut strip resonator crystal, housed in low profile metal can package.

#### **Applications**

- Set-Top Box/Multimedia
- Clock/VCXO Multiplier
- Network Adapter Cards
- Modems
- Microcontrollers and Processors
- Remote control devices

#### **Frequency Range:**

- •3.2 to 36.000 MHz, AT Fundamental
- •30.0 to 125.000 MHz, AT 3rd Overtone
- •26.8 to 54.000 MHz, BT Fundamental

#### Characteristics at 25°C ±2°C:

- Frequency Calibration Tolerance: ±30ppm
- •Load Capacitance: 8 to 32pF or Series Resonance
- Effective Series Resistance (ESR):

Fundamental: 20 to  $200\Omega$  max depending on frequencey 3rd Overtone:  $60 \text{ to } 80\Omega$  max depending on frequency

- Drive Level:  $100\mu W$  typ.  $(500\mu W Max)$
- •Shunt Capacitance: 7pF Max

#### **Temperature Range:**

- $\bullet$  Operating: -20 to +70 °C or -40 to +85 °C
- •Storage: -55 to +125°C

#### **Temperature Stability:**

- ±30ppm (-20 to +70°C) AT Cut
- $\pm 50$  or  $\pm 100$ ppm (-40 to +85°C) AT Cut
- •0 to -100ppm (-20 to +70°C) BT Cut

#### Aging @ 25°C, first year:

• ±3ppm Max

#### **Reflow Temperature:**

•260°C Max, 10 seconds Max (RoHS package)

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## Quartz Crystal Metal Can (TH) 😘

**GB/GG Series Quartz Crystal Legacy 49S Series** 

#### **Mechanical:**

- •Shock: JESD22-B104 Condition B
- Solderability: MIL-STD-883, Method 2003 (non-RoHS package)
- •Solderability: J-STD-002(RoHS package)
- Terminal Strength: MIL-STD-883 Method 2004
- Vibration: JESD22-B103
- •Solvent Resistance: JESD22-B107
- Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition I or J (Non-RoHS package)
- Resistance to Soldering Heat: J-STD-020C Table 5-2 Pb-free devices (3 cycles max) (RoHS package)

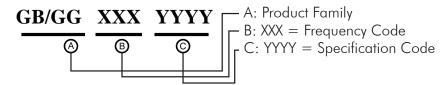
#### **Environmental:**

• Gross Test Leak: JESD22-A109, Condition C • Fine Test Leak: JESD22-A109, Condition A1

Moisture Resistance: JESD22-A113

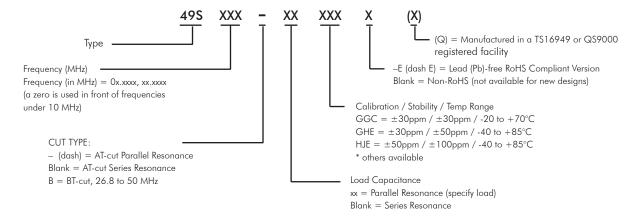
•Insulation Resistance: 500 MΩ min (100 VDC)

#### **Part Ordering Information:**



Following the above format, Saronix-eCera part numbers will be assigned upon confirmation of exact customer requirements.

#### **Legacy Ordering Information - For Reference Only:**



#### Part Number Example:

Freq 5.1234MHz, ±30ppm calib, ±30ppm stab, -20 to +70°C, 16pF = 49S05.1234-16GGC = 49S05.1234-16GGC-E (for lead-free)

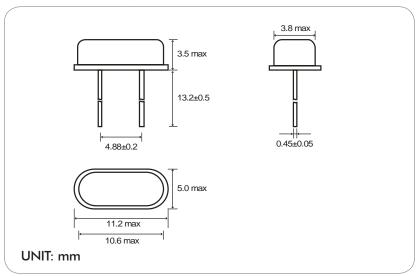


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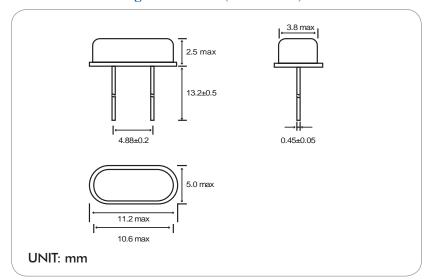
# Quartz Crystal Metal Can (TH) GB

**GB/GG Series Quartz Crystal Legacy 49S Series** 

#### **Mechanical Drawings: GB Series**



#### Mechanical Drawings: GG Series (Low Profile)





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### **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### **Diodes Incorporated:**

GB2500031 GB2500023 GB1200050 GB2500039 GB2500125 GB0400003 GB1760010 GB1470006
GB2500095 GB4000022 GB3000004 GG1300009 GB0610005 GB2000025 GB0400004 GB1200027 GB1600048
GG2500003 GB1600018 GB2500117 GB0800013 GB2500064 GB2450007 GB2400038 GB2500008
GB1000017 GB0800001 GB1200016 GB1350019 GG0600002 GB1200022 GB5000012 GB0360007 GB1530004
GB0360014 GB2500123 GB2500133 GB0800009 GB2450031 GB2700024A GB1430018 GB2400020
GB1220004 GB1920007 GB2500078 GB1020003 GB1220006 GB2400030 GB2500028 GB1500001 GB2500056
GB3000013 GB1470010 GB0800022 GB0600021 GB2500065 GB1350020 GB3200008 GB1120007
GB2500011 GB1200026 GB6400014 GB2700026 GB2500038 GB2500019 GB2000002 GB0800010 GB1430027
GB2000039 GB1200053 GB1600025 GB0800019 GB0800003 GB2400008 GB1600052 GB4800024
GB1200048 GB1200052 GB4800023 GB2500036 GB1100004 GB2000040 GB2500016
GB2500018 GB2500015 GB2500072 GB0400023 GB0930002 GB2000033 GB1000008 GB5000016
GB2210008 GB0800016