Specification for crystal filter: **Q F 60.0 - 4000/02**

1. **General**
   1.1. Package:
   ![Diagram of GA 3.1 package]

   1.2. Type name: QF 60.0-4000/02
   1.3. Number of poles: 4
   1.4. Operating temperature range: -20°C to +70°C
   1.5. Storage temperature range: -35°C to +85°C

2. **Electric values**
   2.1. Nominal centre frequency fo: 60.0 MHz
   2.2. **Pass band**
      2.2.1. Bandwidth between 6 dB - frequencies: \( \geq f_0 \pm 20 \text{ kHz} \)
      2.2.2. Ripple: Gaussian
      2.2.3. Group delay distortion: \( \leq 2 \mu s \text{ at } f_0 \pm 20 \text{ kHz and 25°C} \)
      2.2.4. Group delay: \( \leq 18 \mu s \text{ at } f_0 \)
      2.2.5. Insertion loss: \( \leq 12 \text{ dB} \) (measured on smallest attenuation in pass band)
   2.3. **Stop band**
      2.3.1. \( f_0 - 200 \text{ kHz} \) \( \geq 40 \text{ dB} \)
      2.3.2. \( f_0 +250 \text{ kHz} \) \( \geq 40 \text{ dB} \) (except spurious)
      2.3.3. Alternate attenuation: \( \geq 40 \text{ dB} \)
   2.4. Terminating impedance (input and output): \( 50 \Omega \parallel 0 \text{ pF} \)

3. **Marking**: manufacturer, date code QF 60.0-4000/02

4. **Environment conditions**: Corresponding to Vectron standard CF001

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Edited by: ___________________ date: ___________________ name: ___________________