

Ceramic Filter MHz Lead Type FM Series
(10.52 MHz, 10.7 MHz)

Test Item	Condition & Requirement
1. Storage in High Temperature	After being placed in a chamber with 80 ± 2 for 500 hours and then being placed in natural condition for 2 hours, then measure. <i>To be satisfied Table 1.</i>
2. Storage in Low Temperature	After being placed in a chamber with -25 ± 2 for 100 hours and then being placed in natural condition for 2 hours, then measure. <i>To be satisfied Table 1.</i>
3. Humidity	After being placed in a chamber within $+90$ 95% R. H. at $+40 \pm 2$ for 100 hours and then being placed in natural condition for 2 hour, then measure. <i>To be satisfied Table 1.</i>
4. Heat Shock	1 cycle : $+25$ (15min.) -25 (30min) $+25$ (15min.) $+85$ (30min.) After five above cycles, the filter shall be returned to room temperature for at least 2 hour, then measure. <i>To be satisfied Table 1.</i>
5. Random Drop	The filter shall be measured after 3 times dropping from the height of 1 m on concrete floor. <i>No visible damage and the measured values shall meet Table 1.</i>
6. Vibration	The filter shall be measured after being applied vibration of amplitude to 1.5mm with 10 to 55Hz band of vibration frequency to each of a perpendicular directions for 1 hours. <i>No visible damage and the measured values shall meet Table 1.</i>
7. Resistance to soldering Heat	Lead terminals are immersed up to 2.0 mm from the root of terminals in solder bath of 350 ± 5 for 3 ± 0.5 seconds, and then the filter shall be measured after being placed in natural condition for 2 hour. <i>The measured values shall meet Table 1.</i>
8. Solderability	Lead terminals are immersed in resin for 5 seconds and then immersed in soldering bath of 230 ± 5 for 5 ± 0.5 seconds. <i>90 % min. lead terminals shall be wet with solder.</i>
9. Terminal Strength (1) Pulling (2)Bending	After force 10 seconds of 0.5 kg(1.1lb) is applied to each terminal in axial direction, the filter shall be measured. After lead terminals shall be fixed at 2mm from filter's body, they shall be folded up to 90° from their axial direction and folded back to -90° , then folded back to their axial direction. The speed of folding shall be each 3 seconds. <i>No visible damage and the measured values shall meet Table 1.</i> <i>No cutting off.</i>

Test Item	Condition & Requirement
10. Temperature Coefficient	After measuring the center frequency in the temperature range from -20 to +80 , compare with the value of each temperature and the value of 20 . <i>$0 \pm 50 \text{ ppm}$ (Reference temperature : 20)</i>

TABLE 1

Measurements	Requirements
Center Frequency	$\pm 50 \text{ kHz}$ from Initial Frequency
3dB Bandwidth	$\pm 30 \text{ kHz}$ max.
20dB Bandwidth	$\pm 30 \text{ kHz}$ max.
Insertion Loss	$\pm 2 \text{ dB}$ max.
Spurious Response	25dB min.