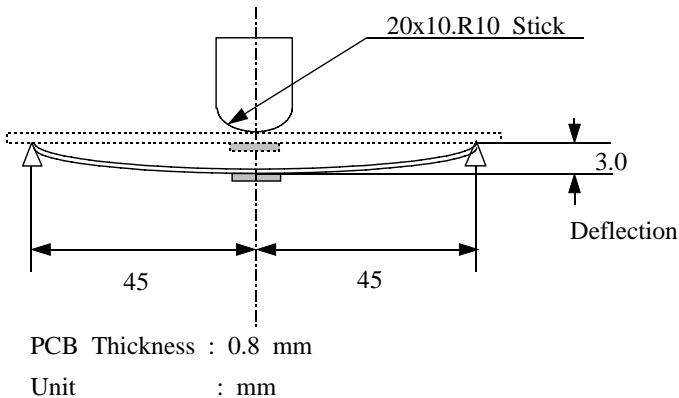


Ceramic Resonator MHz SMD Type Two-Three Terminal Series (2.00MHz to 6.00MHz)

ITEM	CONDITION & REQUIREMENT
5-1. Storage in High Temp.	After being placed in a chamber with $+85 \pm 2$ °C for 500 hours and then being placed in natural condition for 2 hour, then measure. <i>⇒ To be satisfied Table 1.</i>
5-2. Storage in Low Temp.	After being placed in a chamber with -55 ± 2 °C for 500 hours and then being placed in natural condition for 2 hour, then measure. <i>⇒ To be satisfied Table 1.</i>
5-3. Humidity	After being placed in a chamber within $+90$ to 95% R. H. at $+60 \pm 2$ °C for 500 hours and then being placed in natural condition for 2 hour, then measure. <i>⇒ To be satisfied Table 1.</i>
5-4. Heat Shock	After being kept at room temperature, the resonator shall be placed at temperature of -55 °C. After 30 minutes at this temperature resonator shall be immediately placed at temperature of $+85$ °C. After 30 minutes at this temperature resonator shall be returned to -55 °C again. After five above cycles, the resonator shall be returned to room temperature for at least 2 hour, then measure. <i>⇒ To be satisfied Table 1.</i>
5-5. Random Drop	Resonator shall be measured after 3 times random drops from the height of 1 m on wooden floor. <i>⇒ No visible damage and the measured values shall meet Table 1.</i>
5-6. Vibration Test	Resonator 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 2 hours. <i>⇒ No visible damage and the measured values shall meet Table 1.</i>
5-7. Bending Strength PCB	<p>Resonator is soldered onto the center of PCB which is laid on the 2 small supporters spaced 90mm. PCB deflected to 3mm below from horizontal level by the pressing force with 20x10.R10 stick. The force is supplied for 1 second, 5 times repeatedly. Velocity of pole for press : 0.5mm/sec.</p>  <p style="text-align: center;"> \Rightarrow No visible damage and the measured values shall meet Table 1. </p>

ITEM	CONDITION & REQUIREMENT
5-8. Solderability	End terminals are immersed in rosin for 5 seconds and then immersed in soldering bath of $245\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds. $\Rightarrow 75\% \text{ min. End terminals shall be wet with solder.}$
5-9. Resistance to Soldering Heat (1) Reflow	<p>Following profile of heat stress is applied to resonator, then being place in natural condition for 1 hour, resonator shall be measured.</p> <p>1. Preheating conditions shall be 150 to 170°C for 120 to 160 seconds. Ascending time up to 170°C shall be longer than 30 seconds.</p> <p>2. Heating conditions shall be within 10 seconds at 245°C min., but peak temperature shall be lower than 260°C.</p>
(2) Soldering Iron	<p>Soldering iron of $300\pm 5^{\circ}\text{C}$ shall be placed 0.5mm above from electrode of resonator. Melting solder through soldering iron shall be applied to electrode for 3 ± 1 seconds, then being place in natural condition for 24 hour, resonator shall be measured.</p> <p>\Rightarrow The measured values shall meet Table 1.</p>

TABLE 1

MEASUREMENTS	REQUIREMENTS
2~6MHz Resonant Frequency	$\pm 0.3 \%$ max.(from initial value)
2~6MHz Resonant Impedance	30Ω max.