# METAL OXIDE VARISTOR

## Performance Characteristics - Mechanical

| Characteristics | Test Method | Specifications |
|---|---|---|
| **Robustness of Terminations (Tensile)** | After gradually applying the force specified below and keeping the unit fixed for ten seconds, the terminal shall be visually examined for any damage.<br>Terminal diameter — Force<br>$\phi$ 0.6mm — 9.8N (1.0kgf)<br>$\phi$ 0.8mm — 9.8N (1.0kgf)<br>$\phi$ 1.0mm — 19.6N (2.0kgf) | |
| **Robustness of Terminations (Bending)** | The unit shall be secured with its terminal kept vertical and the force specified below be applied in the axial direction. The terminal shall gradually be bent by 90°in one direction, then 90°in the opposite direction, and again back to the original position. The damage of the terminal shall be visually examined.<br>Terminal diameter — Force<br>$\phi$ 0.6mm — 4.9N (0.5kgf)<br>$\phi$ 0.8mm — 4.9N (0.5kgf)<br>$\phi$ 1.0mm — 9.8N (1.0kgf) | No outstanding damage |
| **Vibration** | After repeatedly applying a single harmonic vibration (amplitude: 0.75mm): double amplitude: 1.5mm with 1 minute vibration frequency cycles (10Hz to 55Hz to 10Hz) to each of three perpendicular directions for 2 hours. Thereafter, the unit shall be visually examined. | |
| **Solderability** | After dipping the terminals to a depth of approximately 3mm from the body in a soldering bath of 235 ± 5 ℃ for 2 ± 0.5 seconds, the terminal shall be visually examined. | Approximately 95% of the terminals shall be covered with solder uniformly. |
| **Resistance to Soldering Heat** | After each lead shall be dipped into a solder bath having a temperature 260±5 ℃ to a point 2.0 to 2.5mm from the body of the unit, using shielding board (t=1.5mm), be held there for specified time (5series: 5±1s and others: 10±1s),and then be stored at room temperature and humidity for 1 to 2 hours. The change of Vc and mechanical damages are examined. | $\Delta V_{cmA}/V_{cmA} \leq$ ±5%<br>No outstanding damage |