EURO QUARTZ

CERAMIC FILTER LTS_MCB

- Ceramic discriminators for AM applications:
- SMD type for reflow soldering (JTBC)
- Leaded type (JTBM)

AUDIO IF APPLICATIONS



PHYSICAL CHARACTERISTICS

| Random Drop Test: | Filter performance shall be tested after 3 x random drop from 1.0metre onto concrete floor. No visible damage should be observed and the measured values shall be within specification. |
|----------------------------|--|
| Vibration: | Filte shall be measure after being applied with vibration, amplitude 1.5mm, frequency 10Hz to 55Hz for 2 hours in each of the 3 perpendicular planes. The measured electrical values shall be within specification. |
| Resistance to Solder Heat: | Lead terminals are immersed up to 2.0mm from the filter body in a solder bath $(350^\circ \pm 10^\circ C \text{ for } 5\pm 0.5 \text{ seconds})$. The filter should be measured after being in room temperature for 1 hour. |
| Solderability: | Lead terminals are immersed in resin for 5 seconds then immersed in a soldering bath at 250°C±5°C for 3 seconds ±0.5 seconds. A minimum of 95% of lead terminals surface shall be |

covered with solder.

ENVIRONMENTAL SPECIFICATION

| High Temperature: | After being placed in a chamber at +85°±2°C for 96 hours and left for one hour at room temperature the measured values are to be within specification. |
|-------------------|--|
| Low Temperature: | After being placed in a chamber at -25°±2°C for 96 hours and left for one hour at room temperature the measured values are to be within specification. |
| Humidity: | After being placed in a chamber with a humidity of 90~95% RH and a temperature of +40° for 96 hours and left for one hour at room temperature the measured values are to be within specification. |
| Heat Shock: | After being kept at room temperature the filter shall be placed at a temperature of -25°C. After 30 minutes at the temperature the filter is immediately placed at a temperature of +85°C. After 30 minutes the filter is again placed at a temperature of -25°C. This is one cycle. The filter is subjected to 5 cycles. After one hour at room temperature the measured values are to be within specification. |

LTS_MCB 9.0 max. 0.5 ± 0.1 0.5 ± 0.1 $1\leftrightarrow1$ $1\leftrightarrow1$ 2.5 ± 0.3 1.0 max. 1.0 max. 0.1 0.2 ± 0.1

ELECTRICAL SPECIFICATION

| Nominal Frequency: | 4.5, 5.5, 6.0 or 6.50MHz |
|-----------------------------|--------------------------|
| 3dB Bandwidth: | ±70kHz min. |
| Insertion Loss: | 6.0dB max. |
| 20dB Bandwidth: | 350kHz max. |
| Spurious Loss 0~6.5MHz: | 30dB min. |
| Rated Voltage: | DC 50V (I minute) |
| Insulation Resistance: | 100MΩ min. |
| Temperature Characteristics | |
| (-25° to +85°C): | ±100ppm/°C max. |
| Storage Temperature: | -40°C to +85°C |
| Input/Output Impedance: | 470Ω |
| | |



PART NUMBERS

| Frequency | Part Number |
|-----------|-------------|
| 4.5MHz | LTS4.5MCB |
| 5.0MHz | LTS5.5MCB |
| 6.0MHz | LTS6.0MCB |
| 6.5MHz | LTS6.5MCB |