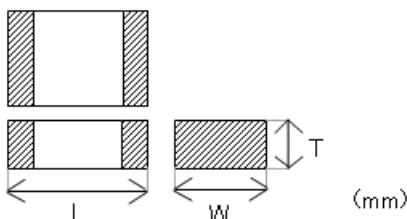


| Murata Global Part No. | Size (mm/inch) | Temp. Chara. | Cap.Value | Cap.Tol | Rated Volt. | Durability (%Rated Volt.) |
|------------------------|----------------|--------------|-----------|---------|-------------|---------------------------|
| GRM188R60J476ME01 | 1608M/0603 | X5R | 47uF | +/-20% | 6.3Vdc | 100% |

1. Dimension



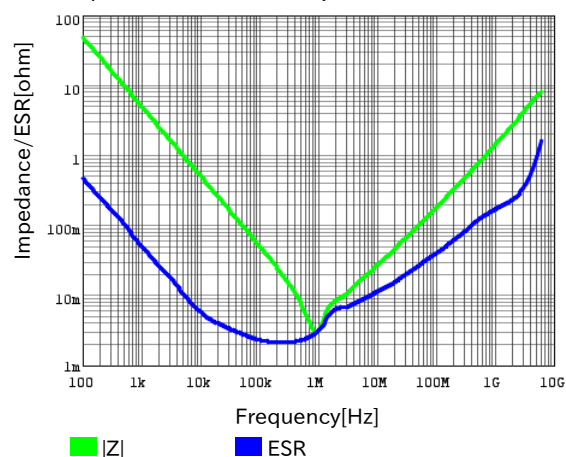
| L | W | T |
|--------------|--------------|--------------|
| 1.6+0.2/-0.2 | 0.8+0.2/-0.2 | 0.8+0.2/-0.2 |

2. Capacitance, D.F. and I.R.

| | Specifications | Measuring condition |
|-------------|------------------|---------------------|
| Capacitance | 37.6uF to 56.4uF | 120Hz / 0.5Vrms |
| D.F. | 0.1(max.) | 120Hz / 0.5Vrms |
| I.R. | 1.06 (min.) Mohm | 6.3V, 60s |

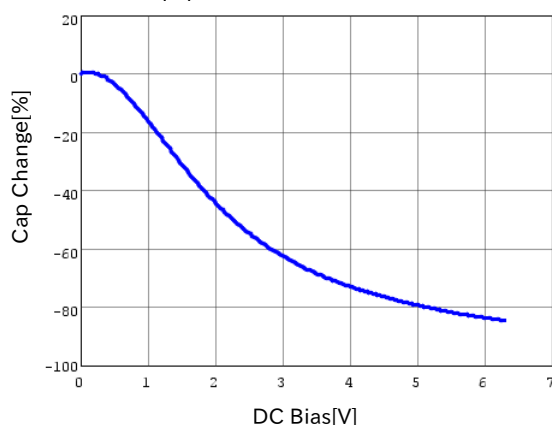
3. Impedance/ESR-Frequency

Equipment: Impedance/Network Analyzer



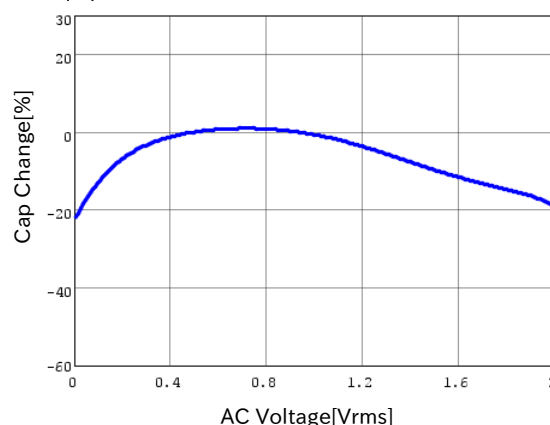
4. Capacitance-DC Bias Characteristics

120Hz / 0.5Vrms Equipment: LCR Meter



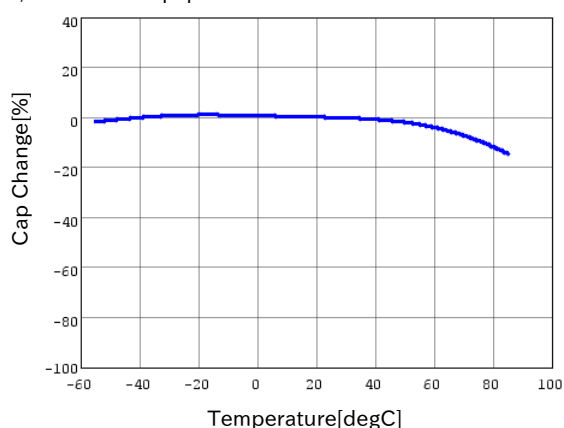
5. Capacitance-AC Voltage Characteristics

120Hz Equipment: LCR Meter



6. Capacitance-Temp. Characteristics

120Hz / 0.2Vrms Equipment: LCR Meter



7. Temperature Rise-Ripple Current

Equipment: Temperature Rise - Ripple Current Measurement system

