



DIP CRYSTAL UNITS

FC-12M Seam Sealing Crystal

- . Very corthpact and thin(2.0*1.2*0.6mm MAX)
- . Frequency range of 32.768KHz
- . Low cost , KHz Frequency , Miniature package, Tight tolerance

| Item | Symbol | MIN | TYP | MAX | Unit | Condition |
|-----------------------------|--------|-----|------|-----|------|-----------|
| Operating Temperature Range | Topt | -40 | | 85 | °C | |
| Storage Temperature Range | Tstg | -55 | | 125 | °C | |
| Load Capacitance | CL | | 12.5 | | pF | |
| Drive Level | DL | | 0.1 | 1 | μw | |

Frequency Stability:

| Item | Symbol | MIN | TYP | MAX | Unit | Condition |
|----------------------------|--------|--------|--------|--------|---------------------|---|
| Tolerance | dF/Fo | -20 | | 20 | ppm | Refer to Center Frequency @25±3°C DL = 0.1 μW |
| Freq. vs Temp. Coefficient | dF/dT | -0.025 | -0.035 | -0.045 | ppm/°C ² | Values are calculated by frequencies at 10 °C , 25 °C , and 40 °C |
| Turnover Temperature | TT | 20 | 25 | 30 | °C | |
| Aging | dF/F25 | -3 | | 3 | ppm | Per Year |

Electrical Performance:

| Item | Symbol | MIN | TYP | MAX | Unit | Condition |
|------------------------------|--------|-------|-----|-----|------|--------------|
| Equivalent Series Resistance | ESR | | | 70 | KΩ | @Series |
| Shunt Capacitance | C0 | 0.6 | 0.9 | 1.2 | pF | |
| Motional Capacitance | C1 | 3 | 3.7 | 4.4 | fF | |
| Quality Factor | Q | 13000 | | | | |
| Insulation Resistance | IR | 500 | | | MΩ | @DC 100 Volt |

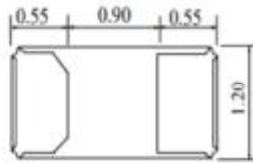
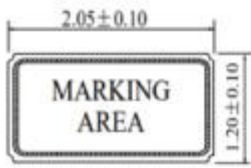


HUBEI JINGMAO ELECTRONICS CO., LTD.

湖北晶茂电子科技有限公司

CRYSTAL CERAMIC DIP FC-12M DIMENSION

PACKAGE DIMENSIONS:Unit: mm



Recommended Solder Pattern

