

Product name FA-238 25.000000 MHz 12.0 +20.0-20.0

Product Number / Ordering code Q22FA23801699xx

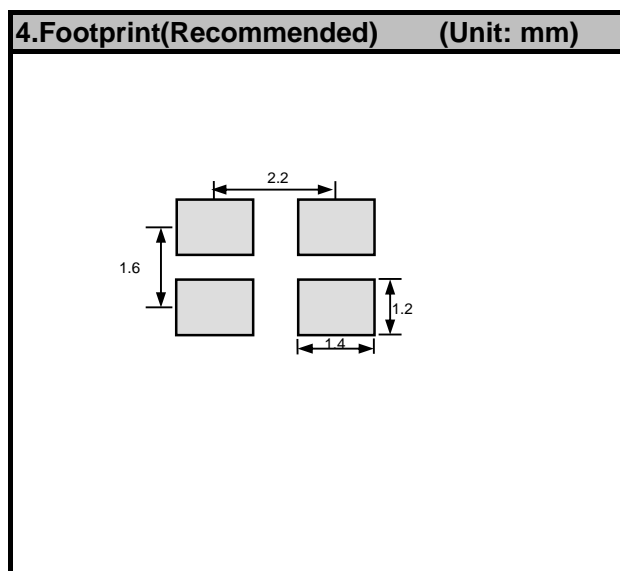
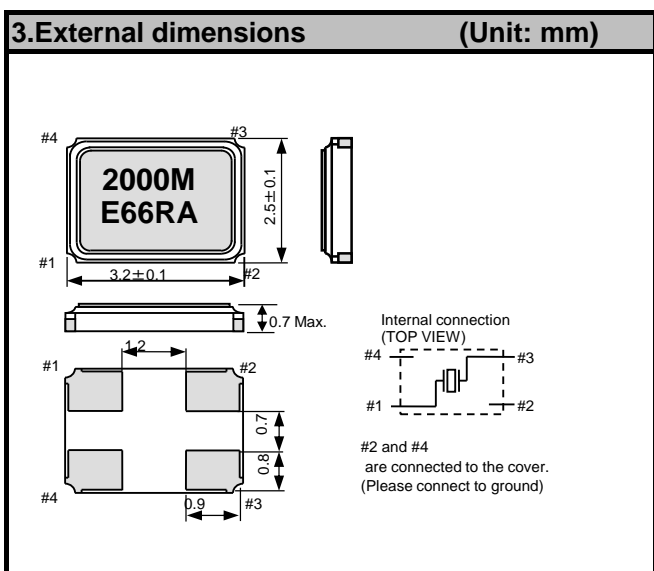
Please refer to the 5.Packing information about xx (last 2 digits)

Pb free / Complies with EU RoHS directive

Reference weight Typ. 16 mg

| 1.Absolute maximum ratings | | | | | | |
|----------------------------|--------|------|------|------|------|---------------------------|
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions / Remarks |
| Storage temperature | T_stg | -40 | - | +125 | °C | Storage as single product |
| Operating temperature | T_use | -40 | - | +105 | °C | |

| 2.Specifications(characteristics) | | | | | | |
|--------------------------------------|--------|------|-----------|------|------------------------|----------------------|
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions / Remarks |
| Nominal frequency | f_nom | — | 25.000000 | — | MHz | Fundamental |
| Frequency tolerance | f_tol | -20 | - | +20 | x 10 ⁻⁶ | @+25°C |
| Frequency Stability over temperature | f_tem | -30 | - | +30 | x 10 ⁻⁶ | -40°C to +85°C |
| Operating temperature | T_use | -40 | - | +85 | °C | |
| Level of drive | DL | 10 | 100 | 200 | μW | |
| Load capacitance | CL | — | 12 | — | pF | |
| Motional resistance (ESR) | R1 | - | - | 50 | Ω | |
| Motional capacitance | C1 | - | 3.07 | - | fF | |
| Motional inductance | L1 | - | 13.18 | - | mH | |
| Shunt capacitance | C0 | - | 1.08 | - | pF | |
| Frequency aging | f_age | -5 | — | +5 | x10 ⁻⁶ /yea | @+25°C, First year |



5.Packing information

[1] Product number last 2 digits code (xx) description The recommended code is "17"

Q22FA23801699xx

| Code | Condition | Code | Condition |
|------|------------------------------|------|----------------|
| 01 | Any Q'ty vinyl bag(Tape cut) | 14 | 1000pcs / Reel |
| 11 | Any Q'ty / Reel | 15 | 2000pcs / Reel |
| 12 | 250pcs / Reel | 00 | 3000pcs / Reel |
| 13 | 500pcs / Reel | 17 | 4000pcs / Reel |

6.Reflow profile

Reflow condition

Pre Heating Temperature

Tp1 ~ Tp2 = + 170 ° C

Heating Temperature

TMlt = + 220 ° C

Peek Temperature

TMax. = + 260 ° C

Point of measuring

In case of Solderability
Terminal.In case of Resistance to soldering heat
Surface.

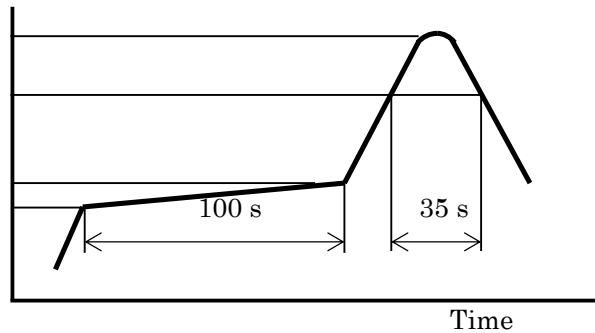
Temperature

TMax.

TMlt

Tp2

Tp1

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