MHz Range Crystal unit

FA-238

 Product name
 FA-238
 16.000000
 MHz 12.0 +30.0-30.0

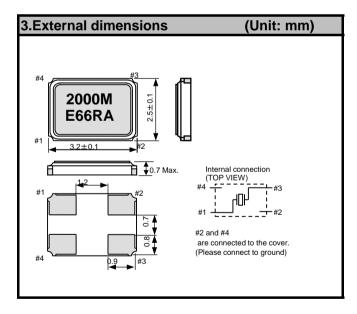
 Product Number / Ordering code
 Q22FA23800216xx

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

Pb free / Complies with EU RoHS directive

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

| 2.Specifications(characteristic | cs) | | | | | |
|---|--------|------|-----------|------|------------------------|----------------------|
| Parameter | Symbol | Min. | Тур. | Max. | Unit | Conditions / Remarks |
| Nominal frequency | f_nom | | 16.000000 | _ | MHz | Fundamental |
| Frequency tolerance | f_tol | -30 | - | +30 | x 10- ⁶ | @+25°C |
| Frequency Stability over temperature | f_tem | -30 | - | +30 | x 10 ⁻⁶ | -20ºC to +70ºC |
| Operating temperature | T_use | -20 | - | +70 | °C | |
| Level of drive | DL | 10 | 100 | 200 | μW | |
| Load capacitance | CL | | 12 | _ | pF | |
| Motional resistance (ESR) | R1 | - | - | 80 | Ω | |
| Motional capacitance | C1 | - | 1.96 | - | fF | |
| Motional inductance | L1 | - | 50.43 | - | mH | |
| Shunt capacitance | C0 | - | 0.93 | - | pF | |
| Frequency aging | f_age | -5 | _ | +5 | x10 ⁻⁶ /yea | @+25°C, First year |



| 4.Footprint(Recommended) | (Unit: mm) |
|--------------------------|------------|
| | |

| 5.Packing | informati | ion | | |
|------------|-----------|-----------------------------------|------|------------------------------|
| [1]Product | number la | st 2 digits code (xx) description | | The recommended code is "17" |
| | Q22FA23 | 800216xx | | |
| | 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 |
| | | | | |

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