MHz Range Crystal unit FA-128

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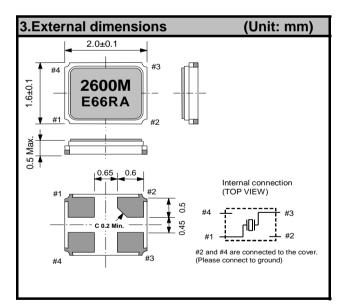
Product name FA-128 20.000000 MHz 9.0 +10.0-10.0 Product Number / Ordering code Q22FA12800232xx

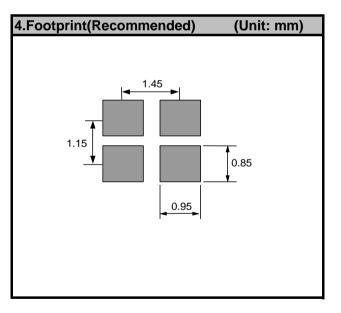
Please refer to the 5.Packing information about xx (last 2 digits)

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 | |

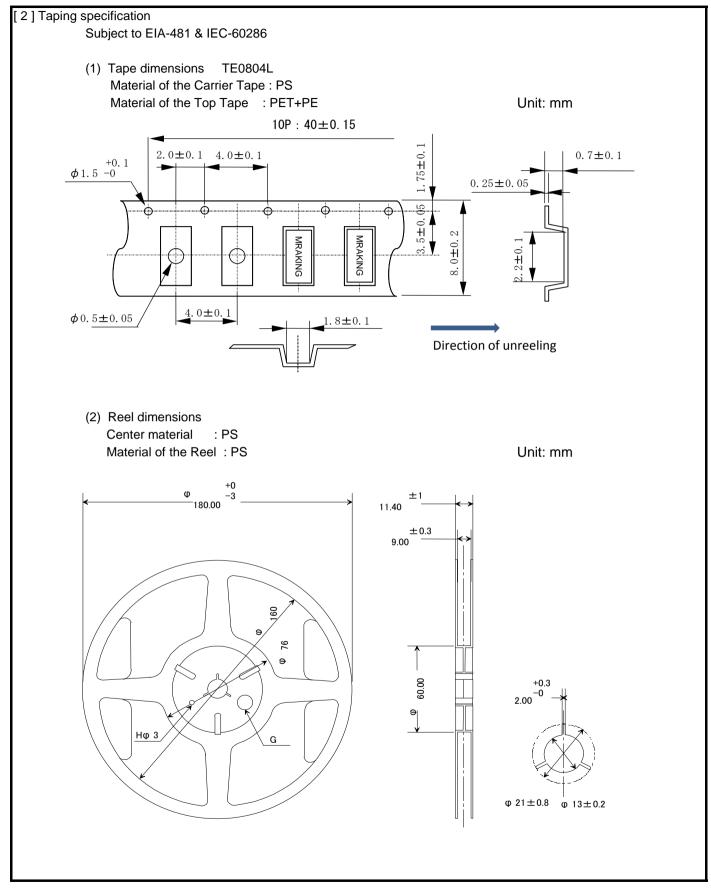
| 2.Specifications(characteris | stics) | | | | | |
|---|--------|------|-----------|------|------------------------|----------------------|
| Parameter | Symbol | Min. | Тур. | Max. | Unit | Conditions / Remarks |
| Nominal frequency | f_nom | - | 20.000000 | - | MHz | Fundamental |
| Frequency tolerance | f_tol | -10 | - | +10 | x 10- ⁶ | @+25°C |
| Frequency Stability over temperature | f_tem | -10 | - | +10 | x 10 ⁻⁶ | -20ºC to +75ºC |
| Operating temperature | T_use | -20 | - | +75 | °C | |
| Level of drive | DL | 10 | - | 100 | μW | |
| Load capacitance | CL | - | 9 | _ | pF | |
| Motional resistance (ESR) | R1 | - | - | 100 | Ω | |
| Motional capacitance | C1 | - | 1.46 | - | fF | |
| Motional inductance | L1 | - | 43.31 | - | mH | |
| Shunt capacitance | C0 | - | 0.56 | - | pF | |
| Frequency aging | f_age | -1 | _ | +1 | x10 ⁻⁶ /yea | @+25°C, First year |



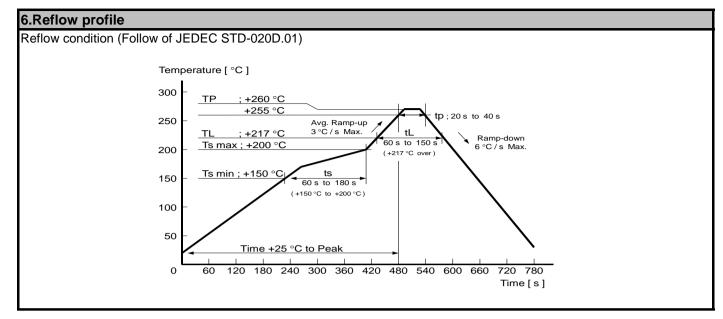


| 5.Packing i | informati | ion | | |
|--------------|-----------|-----------------------------------|------|------------------------------|
| [1]Product r | number la | st 2 digits code (xx) description | | The recommended code is "18" |
| _ | Q22FA12 | 800232xx | | |
| | Code | Condition | Code | Condition |
| | 01 | Any Q'ty vinyl bag(Tape cut) | 00 | 3000pcs / Reel |
| | 11 | Any Q'ty / Reel | 18 | 5000pcs / Reel |
| | 12 | 250pcs / Reel | | |
| | 14 | 1000pcs / Reel | | |

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| | |
| | / Fire work equipment and security equipment |
| | / Traffic control equipment |
| | / And others requiring equivalent reliability. |

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