

Product name FA-238 26.000000 MHz 10.0 +50.0-50.0

Product Number / Ordering code Q22FA23800146xx

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	—	26.000000	—	MHz	Fundamental
Frequency tolerance	f_tol	-50	-	+50	x 10 ⁻⁶	@+25°C
Frequency Stability over temperature	f_tem	-30	-	+30	x 10 ⁻⁶	-20°C to +70°C
Operating temperature	T_use	-20	-	+70	°C	
Level of drive	DL	10	100	200	μW	
Load capacitance	CL	—	10	—	pF	
Motional resistance (ESR)	R1	-	-	50	Ω	
Motional capacitance	C1	-	3.11	-	fF	
Motional inductance	L1	-	12.05	-	mH	
Shunt capacitance	C0	-	1.12	-	pF	
Frequency aging	f_age	-5	—	+5	x10 ⁻⁶ /yea	@+25°C, First year

3.External dimensions (Unit: mm)**4.Footprint(Recommended) (Unit: mm)****5.Packing information**

[1] Product number last 2 digits code (xx) description

The recommended code is "17"

Q22FA23800146xx

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

(1) Tape dimensions TE0804L

Material of the Top Tape : PET+PE

Technical drawing of a metal strip with dimensions and a cross-section. The main view shows a strip with a total width of $10 \text{ P: } 40 \pm 0.1$. The strip has a central section with two rectangular cutouts, each labeled "MRAKIN". The dimensions are as follows:

- Top edge: 2.0 ± 0.05 and 4.0 ± 0.1
- Left edge: $\phi 1.5^{+0.1}_{-0}$
- Right edge: 1.75 ± 0.1
- Bottom edge: 3.5 ± 0.05 and 8.0 ± 0.2
- Central section: 4.0 ± 0.1
- Right edge: 0.25 ± 0.05 and 1.05 ± 0.05
- Bottom edge: 3.5 ± 0.1

A cross-section view at the bottom shows a T-shaped profile with a width of 2.8 ± 0.1 . A blue arrow indicates the "Direction of unreeling".

Material of the Reel : PS

Technical drawing of a wheel assembly, showing front, side, and detail views.

Front View (Left):

- Overall diameter: $\varnothing 180.00$
- Hub diameter: $\varnothing 76$
- Hub bore diameter: $\varnothing 3$
- Spoke diameter: $\varnothing 160$
- Spoke width: G
- Hub width: H

Side View (Right):

- Overall height: 11.40 ± 1
- Hub height: 9.00 ± 0.3
- Spoke height: 60.00
- Spoke diameter: \varnothing

Detail View (Bottom Right):

- Spoke diameter: $\varnothing 21 \pm 0.8$
- Spoke width: $\varnothing 13 \pm 0.2$
- Spoke thickness: 2.00
- Spoke width tolerance: $+0.3$
- Spoke thickness tolerance: -0

6. Reflow profile

Reflow condition

Pre Heating Temperature

$T_{p1} \sim T_{p2} = +170^{\circ}\text{C}$

Heating Temperature

$T_{Mlt} = +220^{\circ}\text{C}$

Peek Temperature

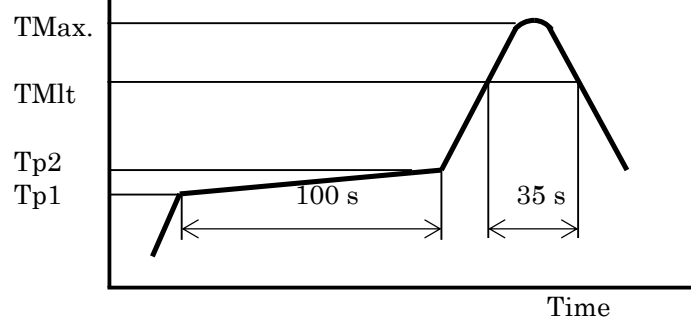
$T_{Max.} = +260^{\circ}\text{C}$

Point of measuring

In case of Solderability
Terminal.

In case of Resistance to soldering heat
Surface.

Temperature



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