

Product name FA-128 48.000000 MHz 8.0 +30.0-30.0

Product Number / Ordering code Q22FA12800089xx

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

Pb free / Complies with EU RoHS directive

Reference weight Typ. 7 mg

1.Absolute maximum ratings

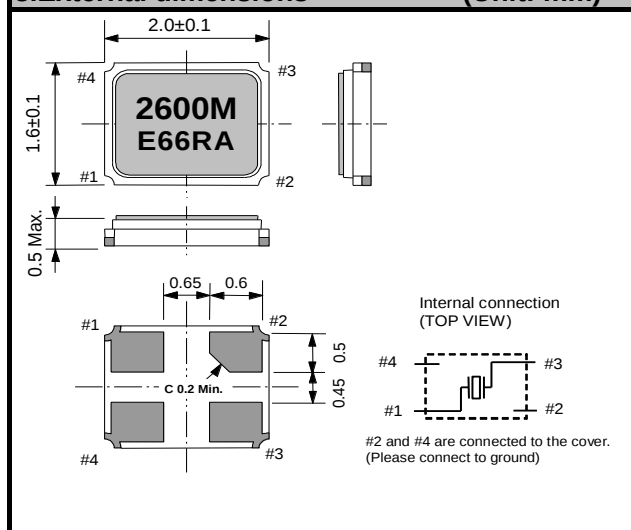
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions / Remarks
Storage temperature	T_stg	-40	-	+125	°C	Storage as single product

2.Specifications(characteristics)

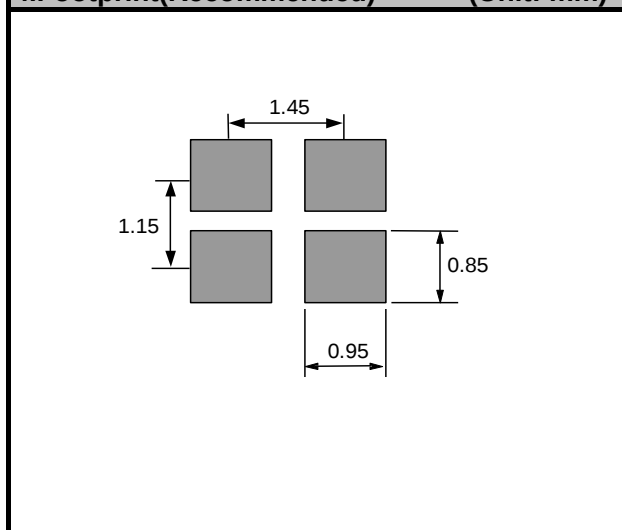
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions / Remarks
Nominal frequency	f_nom	—	48.000000	—	MHz	Fundamental
Frequency tolerance	f_tol	-30	-	30	x 10 ⁻⁶	@+25°C
Frequency Stability over temperature	f_tem	-50	-	50	x 10 ⁻⁶	-30°C to 85°C
Operating temperature	T_use	-30	-	+85	°C	
Level of drive	DL	10	-	100	μW	Recommended:1 to 100μW
Load capacitance	CL	—	8	—	pF	
Motional resistance (ESR)	R1	-	-	60	Ω	
Motional capacitance	C1	-	3.492	-	fF	
Motional inductance	L1	-	3.149	-	mH	
Shunt capacitance	C0	-	0.87	-	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 "18"

Q22FA12800089xx

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		

[2] Taping specification

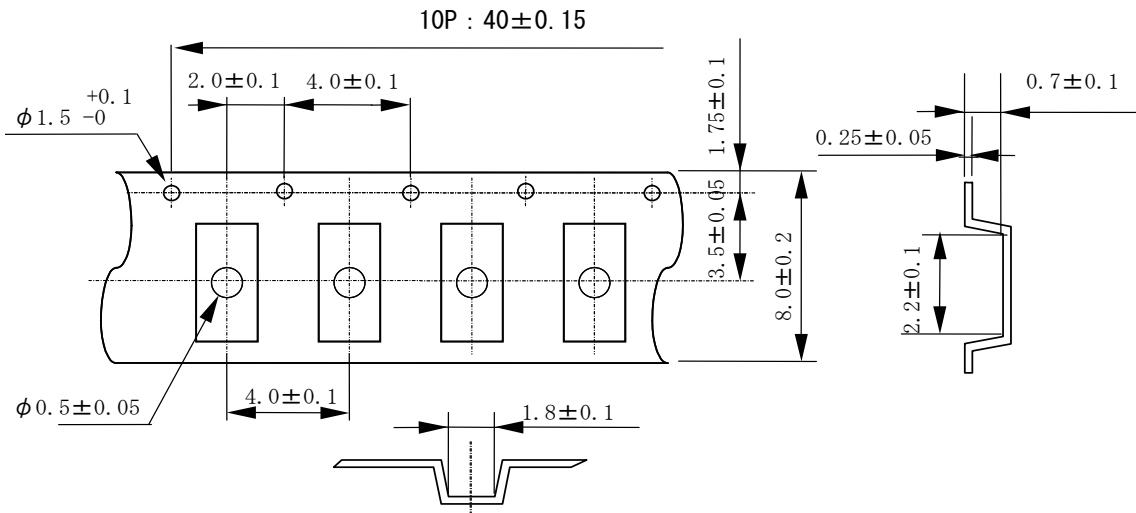
Subject to EIA-481 & IEC-60286

(1) Tape dimensions TE0804L

Material of the Carrier Tape : PS

Material of the Top Tape : PET+PE

Unit: mm

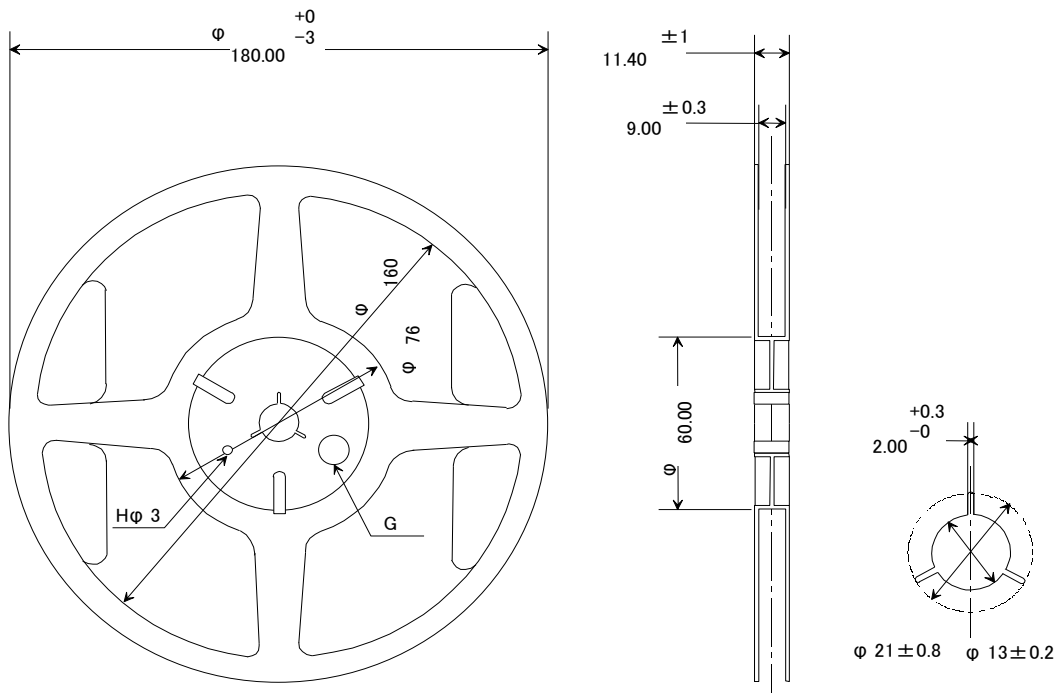


(2) Reel dimensions

Center material : PS

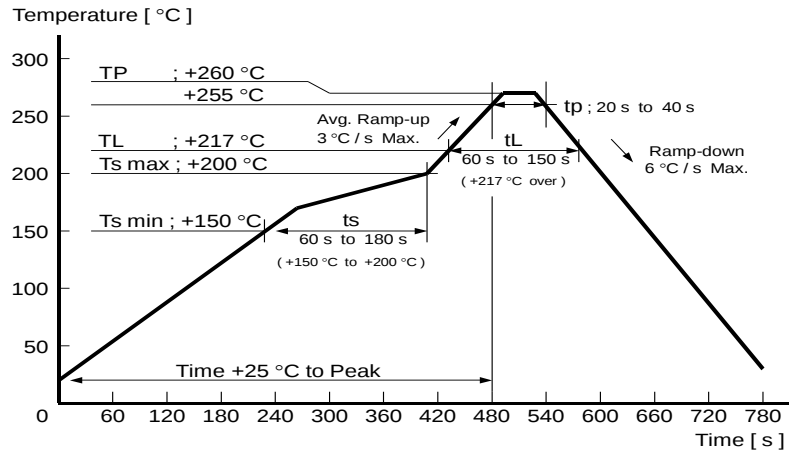
Material of the Reel : PS

Unit: mm



6. Reflow profile

Reflow condition (Follow of JEDEC STD-020D.01)



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