# MHz Range Crystal unit

## FA-238

 Product name
 FA-238
 25.000000
 MHz 16.0 +15.0-15.0

 Product Number / Ordering code
 Q22FA23801835xx

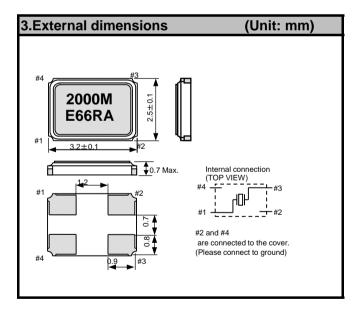
Please refer to the 5.Packing information about xx (last 2 digits)

Pb free / Complies with EU RoHS directive

Reference weight Typ. 16 mg
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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		

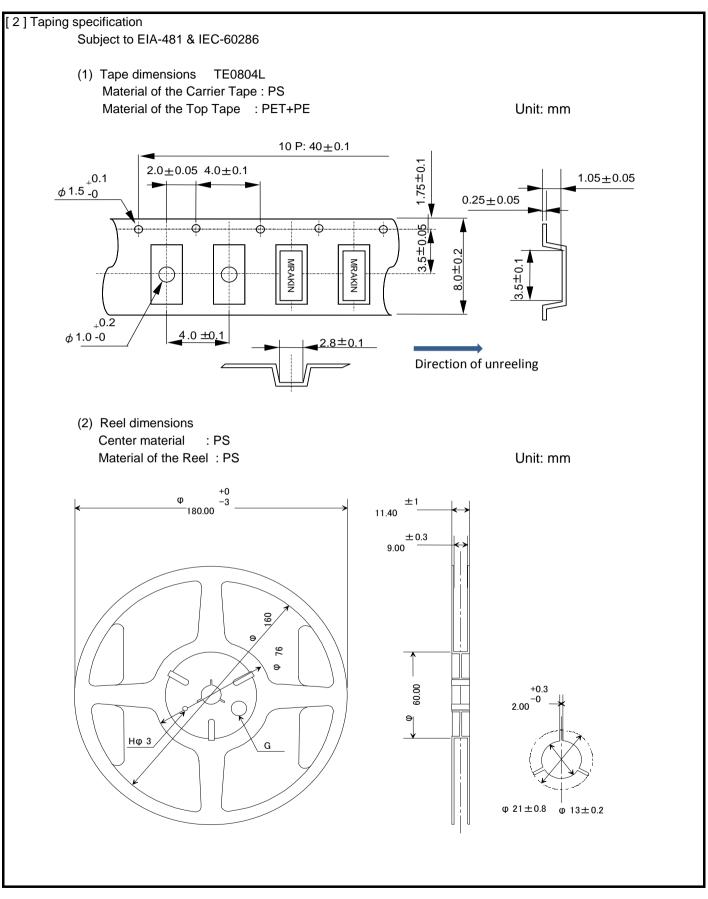
2.Specifications(characteristics)							
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions / Remarks	
Nominal frequency	f_nom		25.000000	_	MHz	Fundamental	
Frequency tolerance	f_tol	-15	-	+15	x 10- <sup>6</sup>	@+25°C	
Frequency Stability over temperature	f_tem	-30	-	+30	x 10 <sup>-6</sup>	0°C to +70°C	
Operating temperature	T_use	0	-	+70	°C		
Level of drive	DL	10	100	200	μW		
Load capacitance	CL		16	—	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 <sup>-6</sup> /yea	@+25°C, First year	



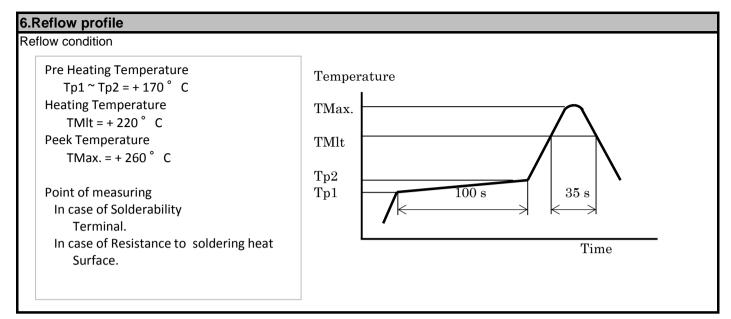
4.Footprint(Recommended)	(Unit: mm)

5.Packing	informati	ion		
[ 1 ]Product number last 2 digits code (xx) description		The recommended code is "17"		
	Q22FA23	801835xx		
	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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