## MHz Range Crystal unit FA-128

#### SEIKO EPSON CORPORATION

# Product name FA-128 48.000000 MHz 16.0 +30.0-30.0 Product Number / Ordering code Q22FA12800187xx

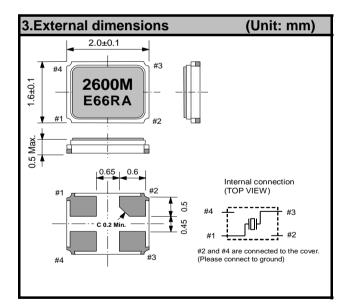
Please refer to the 5.Packing information about xx (last 2 digits)

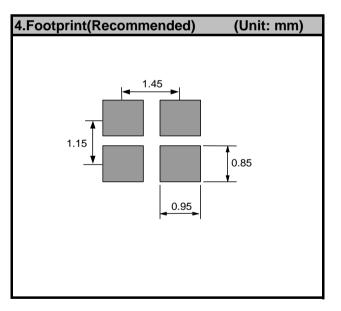
 $\ensuremath{\mathsf{Pb}}\xspace$  free / Complies with EU RoHS directive

Reference weight Typ. 7 mg
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1.Absolute maximum ratings	5					
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	

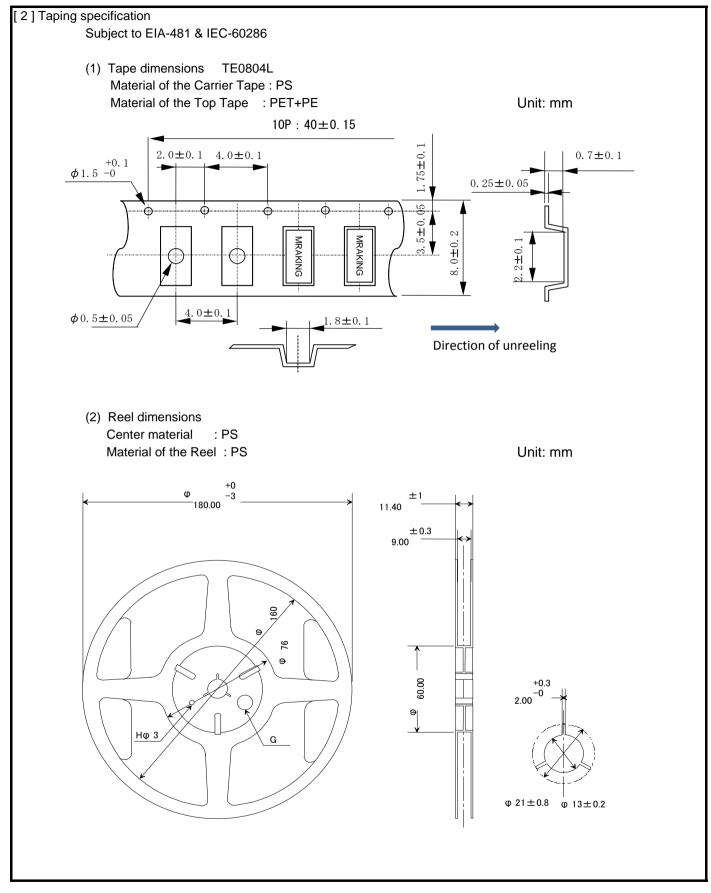
2.Specifications(characteristics)							
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions / Remarks	
Nominal frequency	f_nom	-	48.000000	-	MHz	Fundamental	
Frequency tolerance	f_tol	-30	-	+30	x 10- <sup>6</sup>	@+25°C	
Frequency Stability over temperature	f_tem	-20	-	+20	x 10⁻ <sup>6</sup>	-40°C to +85°C	
Operating temperature	T_use	-40	-	+85	°C		
Level of drive	DL	10	-	100	μW		
Load capacitance	CL	-	16	-	pF		
Motional resistance (ESR)	R1	-	-	60	Ω		
Motional capacitance	C1	-	3.33	-	fF		
Motional inductance	L1	-	3.30	-	mH		
Shunt capacitance	C0	-	0.86	-	pF		
Frequency aging	f_age	-5	_	+5	x10 <sup>-6</sup> /yea	@+25°C, First year	



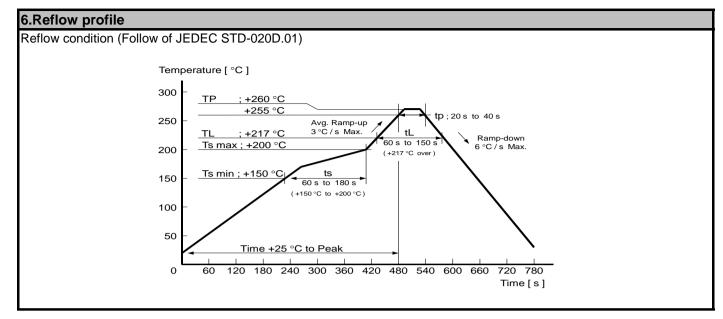


5.Packing	informati	ion		
[1]Product	Product number last 2 digits code (xx) description			The recommended code is "18"
	Q22FA12	800187xx		
	Code	Condition	Code	Condition
	01	Any Q'ty vinyl bag(Tape cut)	00	3000pcs / Reel
	11	Any Q'ty / Reel	18	5000pcs / Reel
	12	250pcs / Reel		
	14	1000pcs / Reel		

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	/ Traffic control equipment
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