kHz Range Crystal unit

Product name Product Number / Ordering code

FC-135R

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FC-135R 32.768000 kHz 6.0 +20.0-20.0 X1A0001410006xx

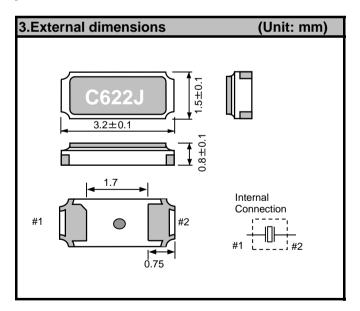
Please refer to the 5.Packing information about xx (last 2 digits)

Complies with EU RoHS directive

Reference weight Typ. 11 mg

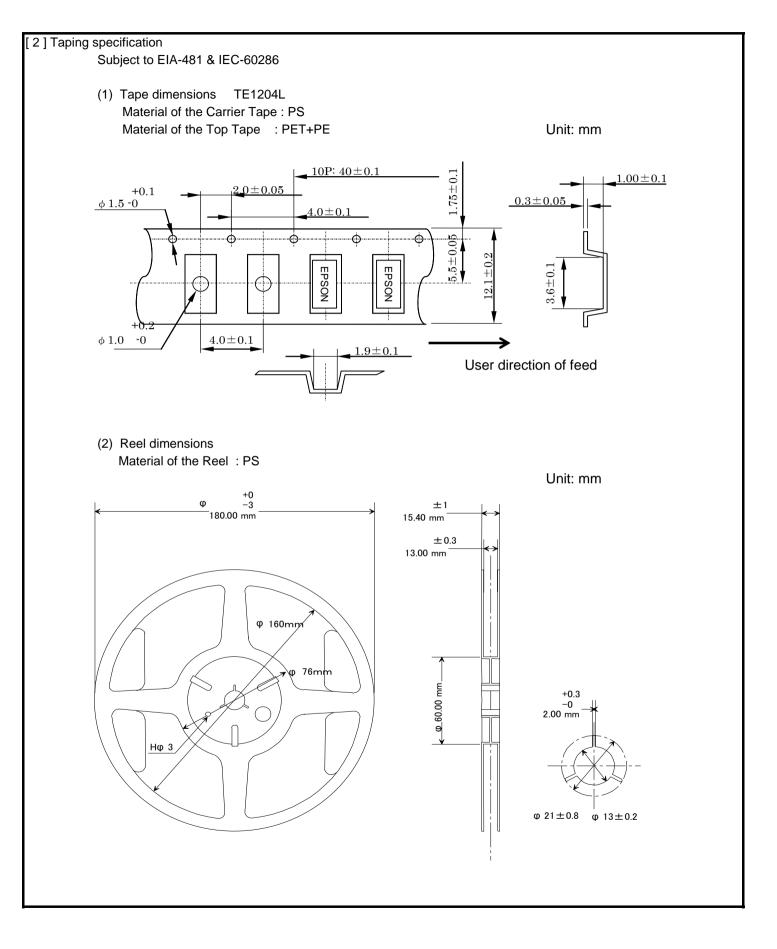
1.Absolute maximum ratings						
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions / Remarks
Storage temperature	T_stg	-55	-	125	°C	Storage as single product
Maximum drive level	GL	-	0.5	-	μW	

2.Specificatoins(characterist	ics)					
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions / Remarks
Nominal frequency	f_nom	-	32.768	-	kHz	
Operating temperature	T_use	-40	-	85	°C	
Level of drive	DL	-	0.1	-	μW	
Frequency tolerance	f_tol	-20.0	-	+20.0	x 10⁻ ⁶	+25°C DL=0.1µW
Turnover temperature	Ti	20	25	30	°C	
Parabolic coefficient	В	-	-	-0.04	x 10 ⁻⁶ /°C ²	
Load capacitance	CL	-	6.0	-	pF	
Motional resistance (ESR)	R1	-	35	50	kΩ	
Motional capacitance	C1	-	3.4	-	fF	
Shunt capacitance	C0	-	1.1	-	pF	
Motional inductance	L1	-	7	-	kH	
Frequency aging	f_age	-3	-	3	x10 ⁻⁶ /yea	@+25°C, First year

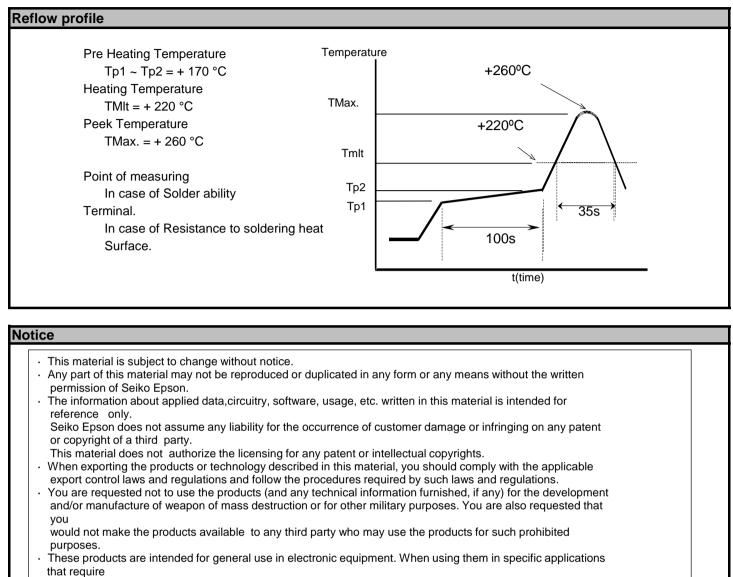


4.Footprint(Recommended)	(Unit: mm)
	1.8
*Do not design any circuit patterns in the sh	aded area.

1]Product number	Product number last 2 digits code (xx) description		The recommended code is "00"			
X1A00	01410006xx					
Cod	e 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					



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extremely high reliability, such as the applications stated below, you must obtain permission from Seiko Epson in advance.

- / Space equipment (artificial satellites, rockets, etc.)
- / Transportation vehicles and related (automobiles, aircraft, trains, vessels, etc.)
- / Medical instruments to sustain life
- / Submarine transmitters
- / Power stations and related
- / Fire work equipment and security equipment
- / Traffic control equipment
- / And others requiring equivalent reliability.

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