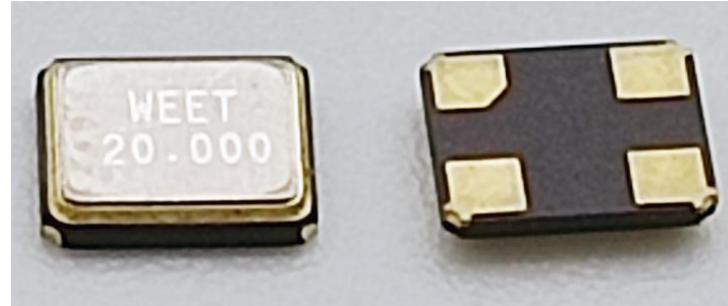


Features

- AT-cut Crystal Construction
- Ultra miniature Ceramic surface mount with Metal Lid
- High temperature, high precision and reliability Characteristics
- Package Size: 3.2×2.5×0.70mm
- Pb-free and RoHS/Green compliant

Applications

- Industrial applications
- Portable devices
- Short-range Wireless module
- Computers, Modems, Microprocessors



Electrical Specifications

Item	Symb.	Min.	Typ.	Max.	Unit	Notes
Frequency Range	Freq.	8.000		54.000	MHz	
Oscillation Mode		Fundamental (AT-cut)				
Frequency Tolerance	$\Delta f/f$			± 10	ppm	at 25°C±2°C
Operating Temperature	T _{use}	-20		70	°C	
		-40		85	°C	
Storage Temperature Range	T _{sta}	-55		125	°C	
Shunt Capacitance	C ₀			3	pF	
Drive Level	DL		10	100	μW	
Load Capacitance	CL	6		20	pF	
Insulation Resistance	IR			500	MΩ	at DC 100V
Aging	f _{age}			3	ppm	1st. Year at 25°C

Frequency Stability & Operating Temperature Range

Temp.	FT	±10ppm	±15ppm	±20ppm	±30ppm
	-20°C to +70°C	△	★	★	★
-40°C to +85°C		△	★	★	★

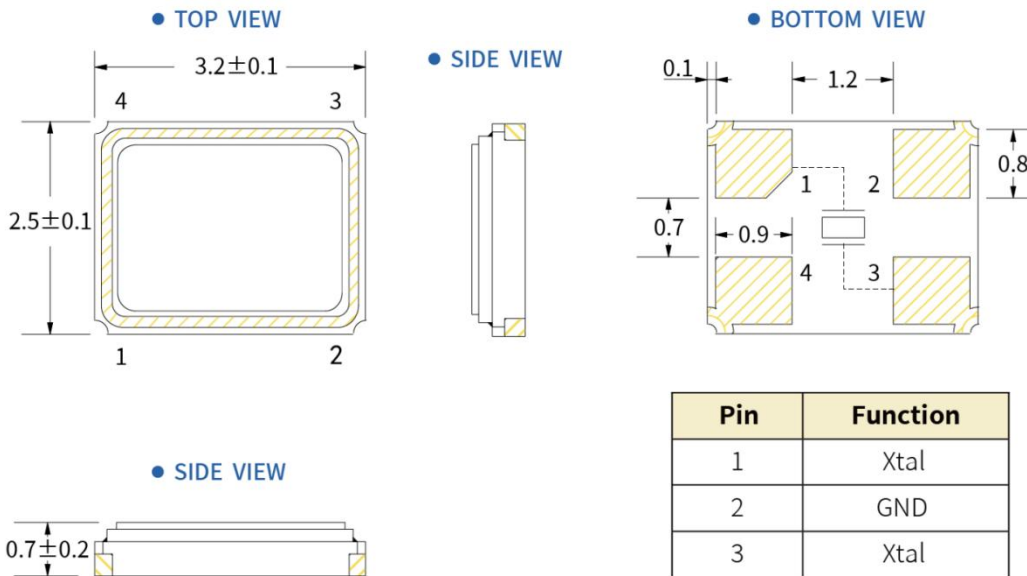
★: Available △: Conditional



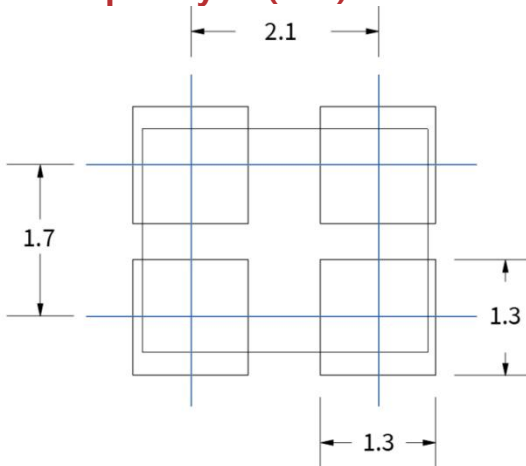
Equivalent Series Resistance

Frequency Range	ESR(Max.)
8MHz ≤ Freq. < 10MHz	300 Ω
10MHz ≤ Freq. < 16MHz	100 Ω
16MHz ≤ Freq. < 20MHz	60 Ω
20MHz ≤ Freq. ≤ 54MHz	30 Ω

Dimensions (mm)



Solder pad layout(mm)

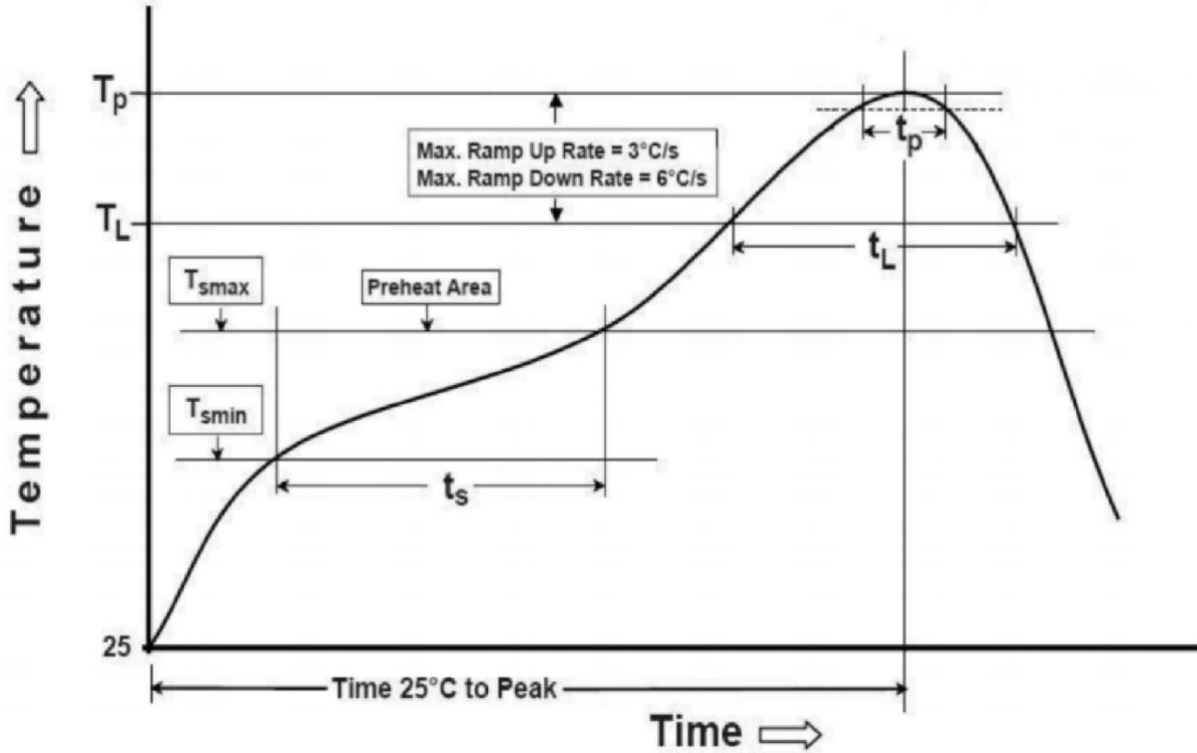


Product Structure

- Metal Lid
- Coated Electrode, Quartz Blank
- Solder Pads, Ceramic Base



Suggested Reflow Profile

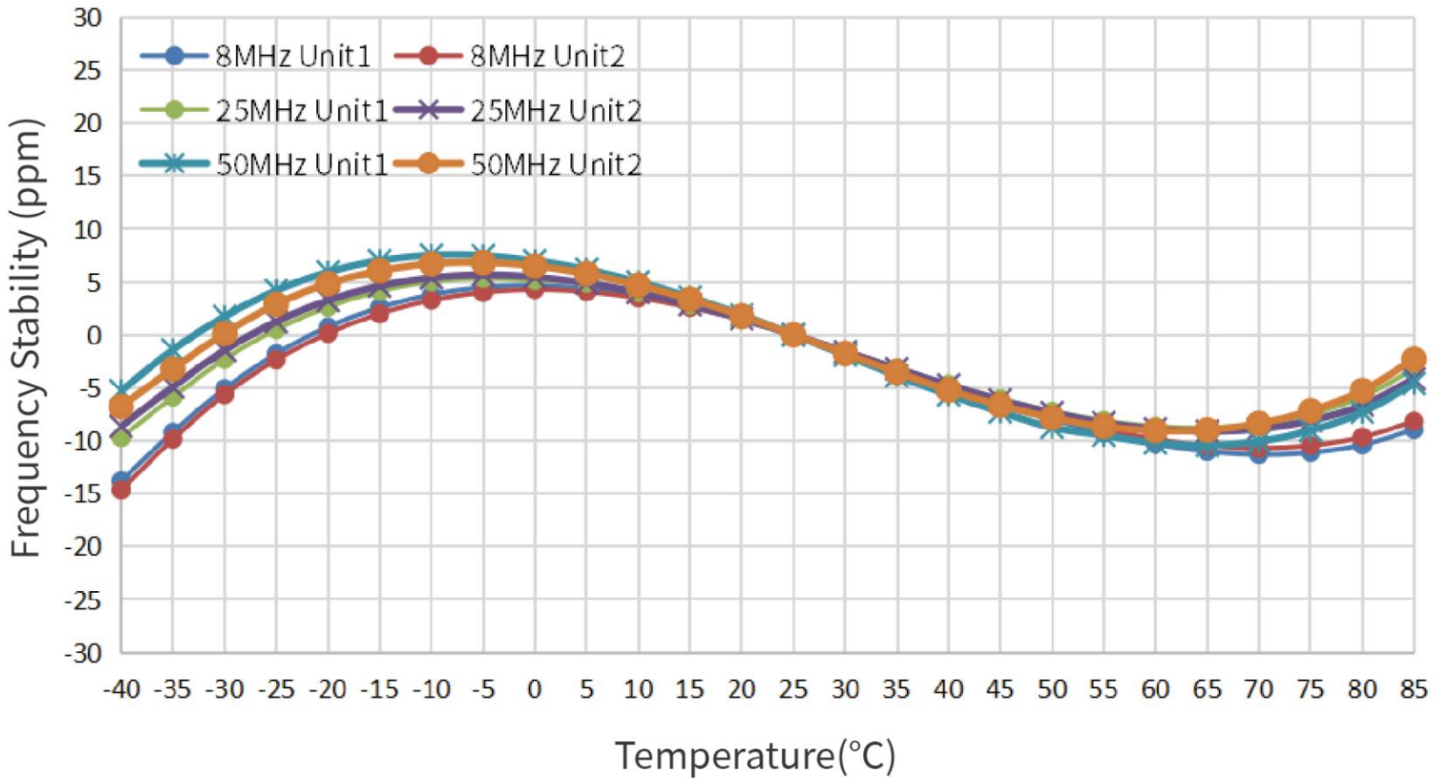


Profile Feature	Sn - Pb Eutectic Assembly	Preheat / Soak
Preheat / Soak		
● Temperature Min (T _s min)	100°C	150°C
● Temperature Max (T _s max)	150°C	200°C
● Time (T _s min to T _s max)	60-120 seconds	60-120 seconds
Ramp - up rate (T _L to T _p)	3°C/ second max.	3°C/ second max.
Time maintained above		
● Liquidous temperature (T _L)	183°C	217°C
● Time (t _L) maintained above T _L	60-150 seconds	60-150 seconds
Peak package body temperature (T _p)	235°C	260°C
Time within 5° C of the specified classification temperature (T _p)	20 seconds	30 seconds
Ramp - down rate (T _p to T _L)	6°C/ second max.	6°C/ second max.
Time 25° C to peak temperature	6 minutes max.	8 minutes max.
Suggest reflow times	2 Times max.	



Frequency Temperature Characteristics

Frequency Stability vs. Temperature (3X 3225 Package)



PN Structure:

WQC-SMD32258.000F1010F30TR

WQC-SMD3225 8.000MHz 10pF±10ppm -40+85C ±30ppm Tape Reel RoHS

WQC-	SMD3225	8.000	F	10	10	F	30	T	R
Series	Frequency Code(MHz)	AT-Fundamental	Load Capacitance	Frequency Tolerance	Operating Temperature	Frequency Drift	Tape Reel	RoHS	
	1	2	3	4	5	6	7	8	



WEE Technology Company Limited
FLAT/RM 705, 7/F, FA YUEN COMM
BLDG NO.75, FA YUEN STREET, MONG
KOK, KL, HONG KONG
www.weetcap.com
info@weetcap.com

All details in this data sheet are subject to change without notice.
For more details and updates, please visit our website.

Copyright © 2000 WEE Technology, All rights reserved.



1. Frequency Code(MHz)

8.000	10.000	11.0592	12.000	12.288
12.800	13.000	13.52127	13.52313	13.560
13.598	13.824	14.31818	14.7456	16.000
16.384	16.9344	18.432	19.200	19.6608
20.000	22.1184	22.5792	24.000	24.305
24.576	25.000	26.000	27.000	27.120
27.1383	28.224	28.63636	29.4912	30.000
32.000	32.768	33.000	36.000	36.864
37.400	38.400	40.000	48.000	50.000
52.000	52.083333	54.000		

3. Capacitance

06	6pF
08	8pF
10	10pF
12	12pF
20	20pF

4. Frequency Tolerance

10	±10ppm
20	±20ppm

5. Operating Temperature

E	-20+70C
F	-40+85C

6. Frequency Drift

10	±10ppm
15	±15ppm
20	±20ppm
30	±30ppm

7. Packing

T	Tape Reel
B	Bulk

8. RoHS

R	RoHS
---	------

