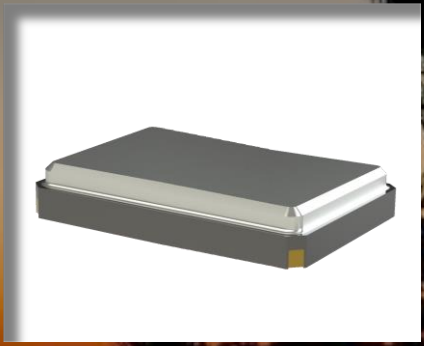
BQCSD-XXXXMF-XXXXT – 4x2.5 Crystals



FEATURES

- ✓ SMD Construction
- ✓ Standard 4x2.5mm Package Size
- ✓ High Stability Over Temp

Crystals

#blileytakesyoufurther

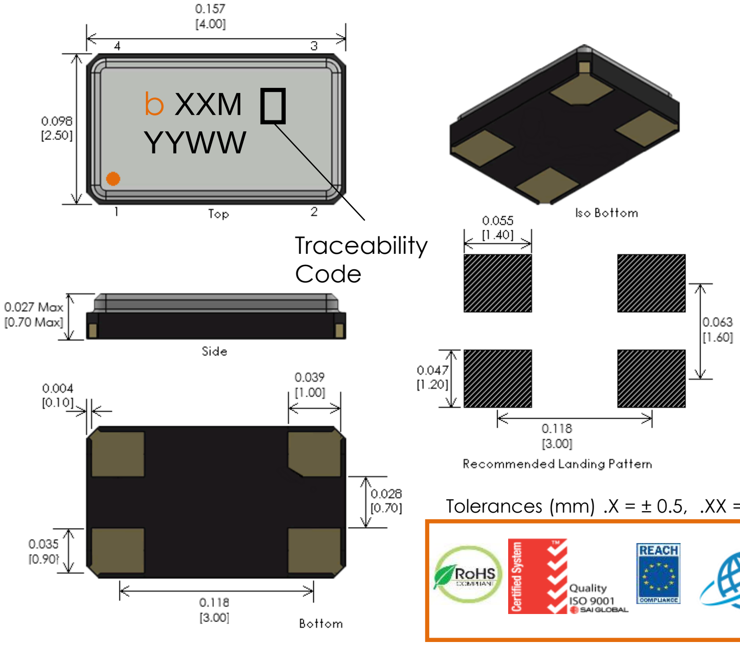
Part Number Configuration

BQCSD – ____M F – _ _ _ _T

Center Frequency	Mode	Frequency Stability	Operating Temperature	Setting Tolerance	Load Capacitance
12MHz to 54MHz	F: Fund	A: ±25ppm	B: -20°C to +70°C	B: ±10ppm	A: 8pF
		D: ±20ppm	C: -40°C to +85°C	D: ±20ppm	F: 18pF
		F: ±15ppm		S: Specify	G: 20pF
					S: Specify

*Not all combinations of options may be possible
**Other options may be available

Physical Specifications



PIN	FUNCTION
1	Crystal
2	Ground
3	Crystal
4	Ground

Tolerances (mm) .X = ± 0.5, .XX = ±0.2 unless otherwise specified

Notes
1) Connection Pads: Gold(10-40 μ in.) over Nickel (100-250 μ in.)
2) Weight = 1.5gms typical

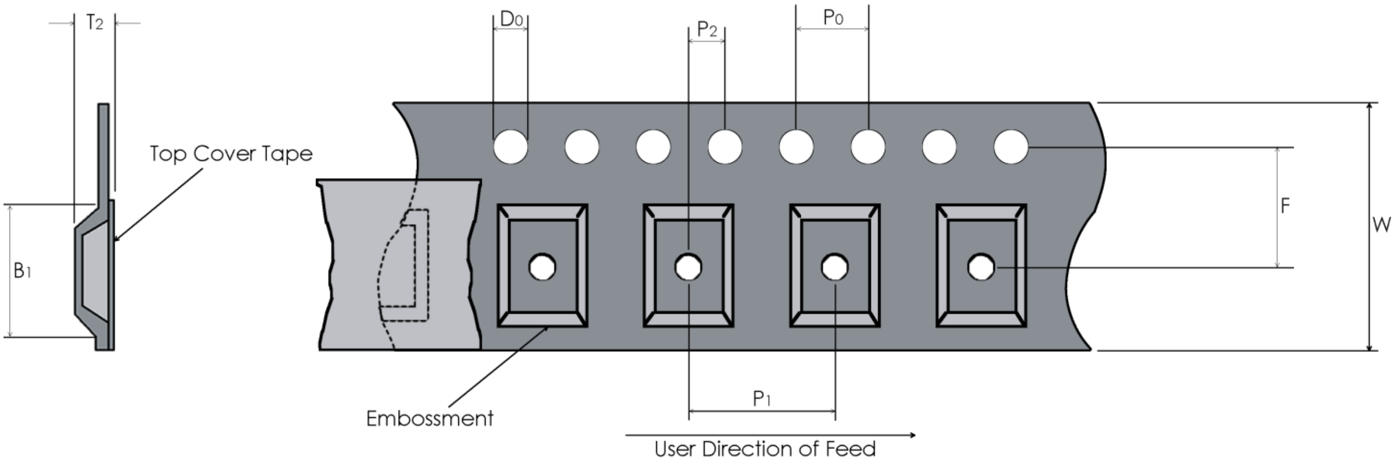
REV 2.0 2018

Performance Specifications

Parameter	Conditions	Min	Typ	Max	Unit
Frequency Range	Fundamental	12		54	MHz
Setting Tolerance	@ + 25°C	±50 Max (see options)			ppm
Frequency Stability		±100 Max (see options)			ppm
Aging	1st Year			±3.0	ppm
Equivalent Series Resistance (max)	12.0 – 14.9 MHz	80			Ω
	15.0 – 29.9 MHz	50			Ω
	30.0 – 54.0 MHz	40			Ω
Drive Level			10	100	µW
C0 (Shunt Capacitance)				5.0	pF
CL (Load Capacitance)	Per Option (typical)	8-32 (see options)			pF
DLD	50nW to 100µW			±10	ppm
RLD	50nW to 100µW			20%	Ω
Operating Temp Range	See Options	-20 to +70 / -40 to +85			°C
Storage Temp Range		-55		+105	°C
Sealing Method		Seam Weld			
Moisture Sensitivity Level	1				

Tape and Reel

Embosed Carrier Dimensions (8mm, 12mm, 16mm, 24mm Tape Only)



Tape Dimensions (mm)								Reel Dimensions (mm)	
W	F	Do	Po	P1	P2	B1	T2	Outside Dia.	Parts / Reel
12	4.5	1.5	4.0	8.0	2.0	4.3	1.0	180	1,000

Recommended Reflow Profile

Reflow Profile: in accordance to IPC/JEDEC J-STD-020 (Latest Revision)

Additional Notes:

- This part has been designed for pick and place reflow soldering
- This part may be reflowed once
- This part should not be reflowed in the inverted position

Packaging

Packaging: All packaging must conform to ESD Controls detailed in ANSI/ESD S20.20 (Latest Revision)