BQCSG-XXXXMX-XXXXT – 2.0x1.6 Crystals

FEATURES

- ✓ SMD Construction
- ✓ Standard 2.0x1.6mm Package Size
- ✓ High Stability Over Temp

Crystals

#bliileytakesyoufurther

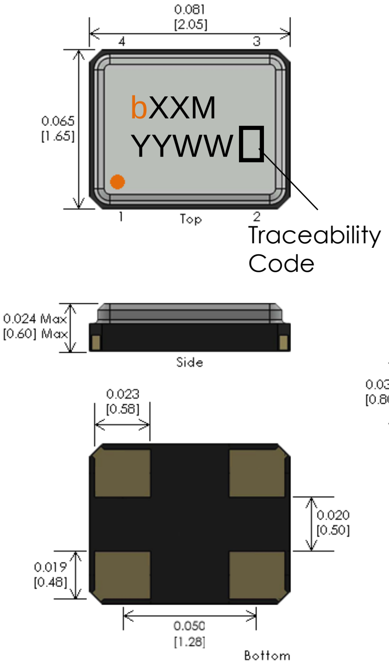
Part Number Configuration

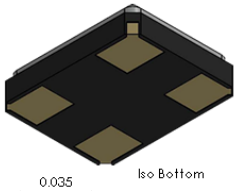
BQCSG – ____M_ – _ _ _ _T

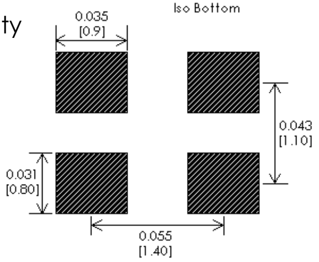
Center Frequency	Mode	Frequency Stability	Operating Temperature	Setting Tolerance	Load Capacitance
16MHz to 60MHz	F: Fund	B: ±50ppm D: ±20ppm F: ±15ppm	B: -20°C to +70°C C: -40°C to +85°C	B: ±10ppm D: ±20ppm S: Specify	A: 8pF F: 18pF G: 20pF S: Specify

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

Physical Specifications







Recommended Landing Pattern

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

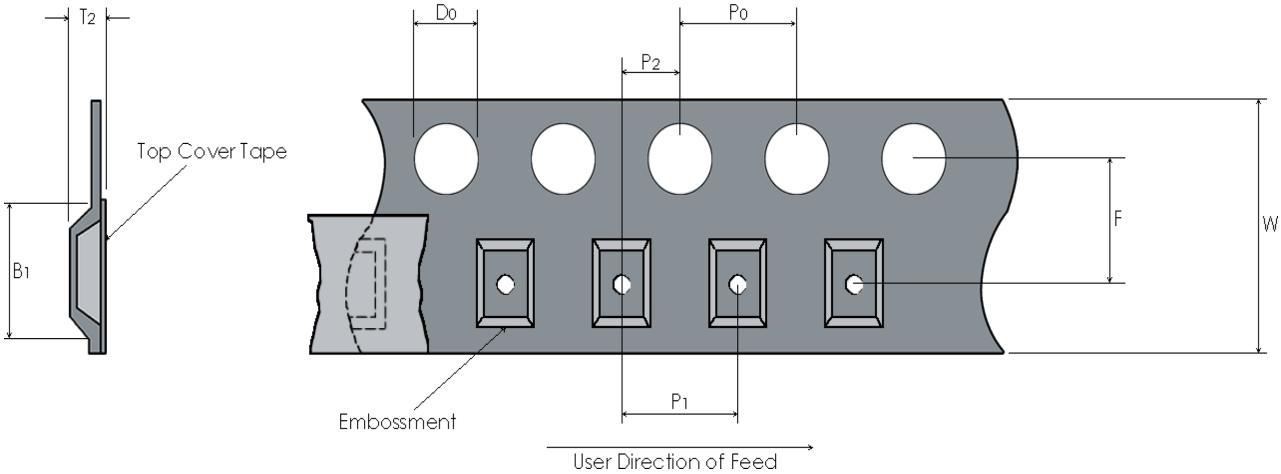
REV 2.0 2018

Performance Specifications

Parameter	Conditions	Values	Unit
Frequency Range		16.0 – 60.0	MHz
Frequency Tolerance	@ + 25°C	±20 Max (see options)	ppm
Frequency Stability		±50 Max (see options)	ppm
Aging	Max 1st Year	±3.0	ppm
Equivalent Series Resistance (max)	16.0 – 19.0 MHz	150	Ω
	20.0 – 39.0 MHz	100	Ω
	40.0 – 60.0 MHz	70	Ω
Insulative Resistance	Min @ 100Vdc ±15Vdc	500	MΩ
Drive Level		10 Typ, 100 Max	µW
C0 (Shunt Capacitance)	Max (typical)	5.0	pF
CL (Load Capacitance)	Per Option (typical)	6-20 (see options)	pF
DLD	50nW to 100µW	±10 Max	ppm
RLD	50nW to 100µW	20% Max	Ω
Operating Temp Range		-20 to +70 / -40 to +85	°C
Storage Temp Range		-55 to +125	°C
Sealing Method		Seam Weld	
Moisture Sensitivity Level	1		

Tape and Reel

Embossed 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
8	3.5	1.5	4.0	4	2.0	2.1	0.6	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)