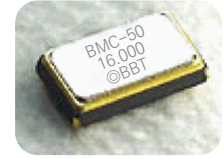


SMD CRYSTAL

Features

- Typical 5.0x3.2x1.0 mm ultra thin ceramic package.
- Tape & Reel package for automatic assembly.
- Tight tolerance 10 ppm available.
- Packing : Tape & Reel, 1000/2000pcs per Reel



Application

- Bluetooth, GPS
- Display, TV(FPD/FTF LCD)
- Computer Peripherals

Specifications

RoHS Compliance

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55	-	125	°C
Level of Drive	-	10	100	μW
Shunt Capacitance(Co)	-	-	7.0	pF
Insulation Resistance	500MΩ @DC100V	-	-	
Aging	±3.0			ppm/year

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

Equivalent Series Resistance (E.S.R)

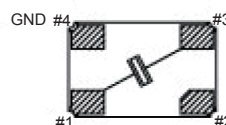
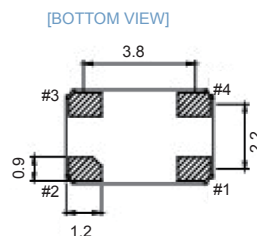
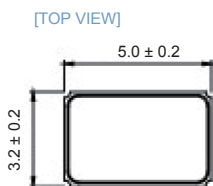
Type Frequency	Mode	ESR
11MHz≤ Freq. <12MHz	Fund	65Ω
12MHz≤ Freq. <13MHz	Fund	60Ω
13MHz≤ Freq. <16MHz	Fund	55Ω
16MHz≤ Freq. <24MHz	Fund	50Ω
24MHz≤ Freq. <48MHz	Fund	40Ω
48MHz≤ Freq. <53.125MHz	Fund	35Ω

Freq. Stability vs Temp. Range

Temp.	PPM		
	±10	±15	±20
-10 ~ +60°C	△	○	○
-20 ~ +70°C	△	○	○
-40 ~ +85°C	X	○	○

*○:Standard △:Available(case by case) X:Not available

DIMENSION (Unit: mm)



Marking #2 and #4 is connected with metal cap of top

SOLDER PAD LAYOUT (mm)

