

Package : TSS-5032A

Surface Mount Type Crystal Units

■Feature

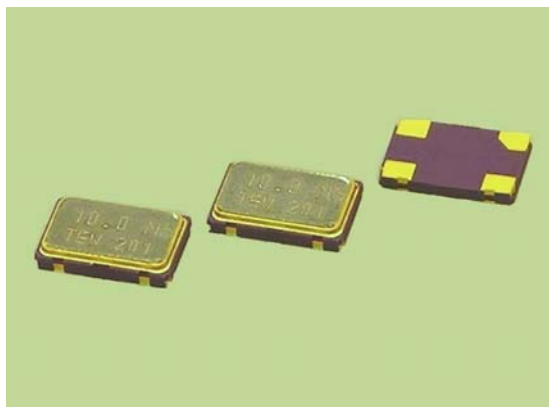
Standardized 5.0×3.2mm package. Hermetic sealing by seam welding. Excellent mechanical shock and vibration resistance. Product is lead free in construction. Can be mounted to PCB using a lead free solder reflow process.

■Application

Cellular Phones, NFC, Bluetooth, WLAN , Zigbee

■Standard Specifications

Size (mm)	5.0×3.2, 0.90±0.1	
Overtone Order	Fundamental / 3rd Overtone	
Frequency Range (MHz)	Fundamental	10 to 60 (See Table 1)
	3rd Overtone	60 to 100
Equivalent Series Resistance (Ω)	Fundamental	50max. to 100max.
	3rd Overtone	80 max.
Drive Level (μW)	50	
Operating Temperature Range	See Table 2	
Frequency Temperature Characteristics (in reference to 25 °C)	See Table 2	



■Table 1 Typical Frequencies

Frequency (MHz) - ESR	
10.000 [ESR=100 Ω max.]	12.000 [ESR=60 Ω max.]
13.000 [ESR=60 Ω max.]	14.400 [ESR=60 Ω max.]
16.000 [ESR=60 Ω max.]	20.000 [ESR=50 Ω max.]
24.000 [ESR=50 Ω max.]	26.000 [ESR=50 Ω max.]
27.000 [ESR=50 Ω max.]	32.000 [ESR=50 Ω max.]
39.000 [ESR=50 Ω max.]	40.000 [ESR=50 Ω max.]
44.000 [ESR=50 Ω max.]	54.000 [ESR=50 Ω max.]

■Table 2 Frequency Temperature Characteristics

Temperature Range	Temperature Characteristics(ppm)	Frequency Tolerance(ppm@25°C)
-10 to 60 °C	±5 max.	±10 max , ±20 max (25 °C ± 3°C)
-20 to 70 °C	±10 max.	
-30 to 85 °C	±15 max.	

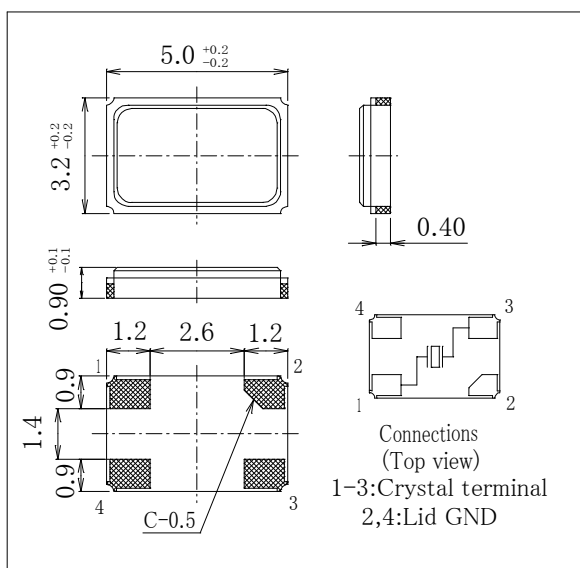
Note :

Modified specifications

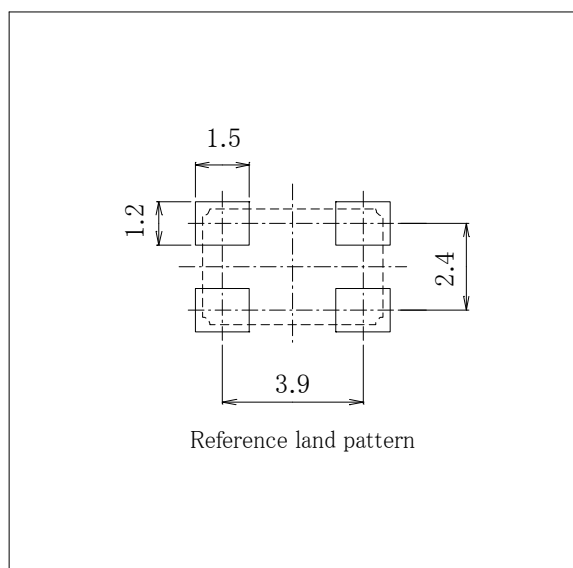
are available upon

request for specific applications.

■Outline Dimensions



■Reference Land Pattern



The ordering number will be obtained separately by customer's requirement.