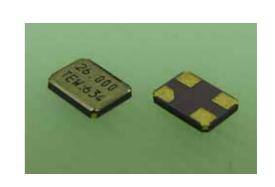


# **TAS-3225J**

### **Miniature Surface Mount Type Crystal Units**

#### **■**Feature

Small size area with reduced height (3.2×2.5, 0.55±0.05). Hermetic sealing by Au-Sn method. Part is preconditioned to temperatures well beyond lead free reflow for unsurpassed reliability. Frequency starting from 13MHz. Extremely well suited for all Cellular Phones, NFC, Bluetooth, WLAN and Zigbee where small size is important. Product is lead free in construction. Can be mounted to PCB using a lead free solder reflow process.



### **■**Standard Specifications

Size (mm)	3.2×2.5, 0.55t±0.05t	
Overtone Order	Fundamental	
Frequency Range (MHz)	13 ~ 60 (See Table 1)	
Equivalent Series Resistance (Ω)	120 max.	
Drive Level (μW)	30, 50	
Operating Temperature Range	See Table 2	
Frequency Temperature Characteristics	See Table 2	
(in reference to 25 °C)	See Table 2	

## **■**Table 1 Typical Frequencies

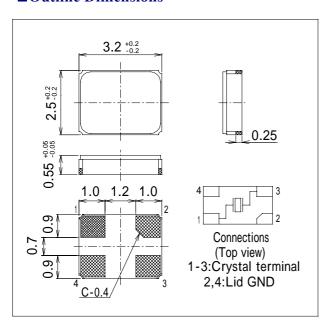
Frequency (MHz)		
13.000	14.400	
16.000	19.200	
19.680	19.800	
24.000	26.000	
32.000	36.000	
40.000	44.000	

#### **■**Table 2 Frequency Temperature Characteristics

Temperature Range	Temperature Characteristics(×10 <sup>-6</sup> )	Frequency Tolerance(×10 <sup>-6</sup> )
-10 ~ 60 °C	±5	
-20 ~ 70 °C	±10	$\pm 10 \sim \pm 50$ (25 °C ± 3°C)
-30 ~ 85 °C	±15	` ,

Products with specific requirements are available request.

#### **■Outline Dimensions**



# **■**Reference Land Pattern

