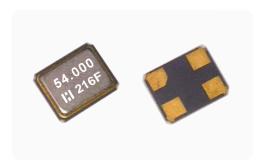


# SMD CRYSTAL UNITS



## • E3SB Series



## 3225 Seam Sealing Crystal

#### **FEATURES**

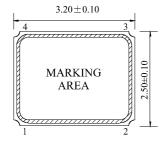
- Compact and thin (3.2X2.5X0.75mm.)
- Excellent electrical performance, ideal for OA (office automation),
   AV (audiovisual), Bluetooth and Wireless LAN applications
- Excellent heat resistance and shock resistance.
- Lead-free. Meets the requirements for re-flow profiling using lead -free solder

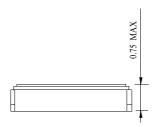
### **Electrical Specifications**

Item	Туре	E3SB				
Frequency Range	F0	8.0 to 9.999MHz	10 to 19.99MHz	20 to 23.999MHz	24 to 62.500MHz	60 to 114.285MHz
Mode of Vibration		Fundamental 3RD				
Load Capacitance	CL	6 to 20pF				
Frequency Tolerance	△ F/F0	±10ppm,±15ppm,±30ppm(At 25℃)				
Equivalent Series Resistance	ESR	500 Ω max.	150Ω max.	70 Ω max.	50 Ω max.	100 Ω max.
Temperature Stability	TC	$\pm 30$ ppm(Refer to 25°C) $\pm 10$ ppm, $\pm 15$ ppm, $\pm 30$ ppm(Refer to 25°C)				
Operating Temperature Range	Topr	-20~+70°C,-30~+85°C Option				
Storage Temperature Range	Tstg	−55~+125°C				
Shunt Capacitance	C0	3pF max.				
Insulator Resistance	IR	500M Ω min. (At 100V <sub>DC</sub> )				
Drive Level	DL	100μW( 200μW max.)				
Aging	Fa	±2ppm max. (At 25℃, First year)				
Packing Unit		3000pcs/reel				

<sup>\*\*</sup>Please contact us for inquiries regarding other Specifications

### **Mechanical Dimensions(mm)**





# Top View 1.00 1.20 1.00 4 3 8

#### Recommended Solder Pattern

