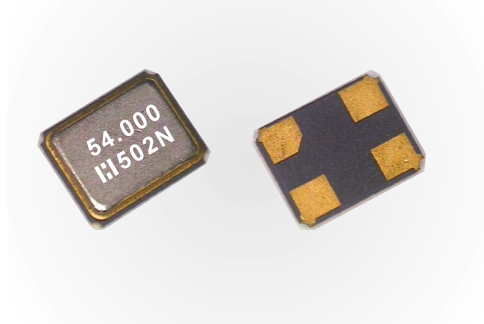




## • E3SB Series 3.2\*2.5 Seam Sealing Crystal



### FEATURES

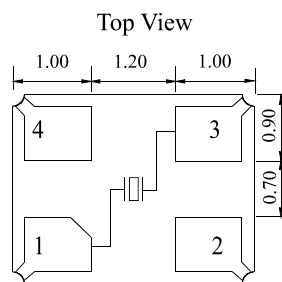
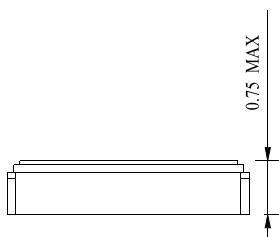
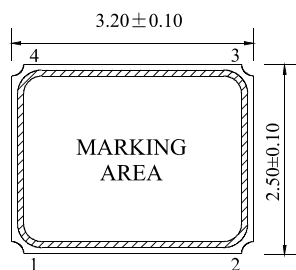
- Compact and thin (3.2X2.5X0.75mm max.)
- Excellent electrical performance, ideal for OA (office automation), AV (audiovisual), Bluetooth and Wireless LAN applications
- Excellent heat resistance and shock resistance.
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder

### Electrical Specifications

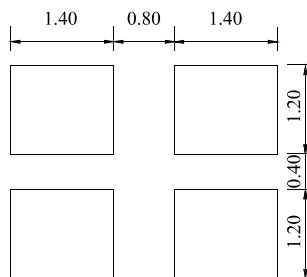
Item	Type	E3SB				
		10 to 11.999MHz	12 to 19.999MHz	20 to 23.999MHz	24 to 64.000MHz	64 to 115.000MHz
Frequency Range	F0	10 to 11.999MHz	12 to 19.999MHz	20 to 23.999MHz	24 to 64.000MHz	64 to 115.000MHz
Mode of Vibration		Fundamental				3RD
Load Capacitance	CL	6 to 20pF				
Frequency Tolerance	$\Delta F/F0$	$\pm 10\text{ppm}, \pm 15\text{ppm}, \pm 30\text{ppm}(\text{At } 25^\circ\text{C})$				
Equivalent Series Resistance	ESR	150 $\Omega$ max.	100 $\Omega$ max.	70 $\Omega$ max.	50 $\Omega$ max.	100 $\Omega$ max.
Temperature Stability	TC	$\pm 10\text{ppm}, \pm 15\text{ppm}, \pm 30\text{ppm}(\text{Refer to } 25^\circ\text{C})$				
Operating Temperature Range	T <sub>OPR</sub>	-20~+70°C, -30~+85°C Option				
Storage Temperature Range	T <sub>STG</sub>	-55~+125°C				
Shunt Capacitance	C0	3pF max.				
Insulator Resistance	IR	500M $\Omega$ min. (At 100VDC)				
Drive Level	DL	100 $\mu$ W (200 $\mu$ W max.)				
Aging	Fa	$\pm 2\text{ppm}$ max. (At 25°C, First year)				
Packing Unit		3000pcs/reel				

\*\*Please contact us for inquiries regarding other Specifications

### Mechanical Dimensions(mm)



### Recommended Solder Pattern



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Specifications are subject to change without notice