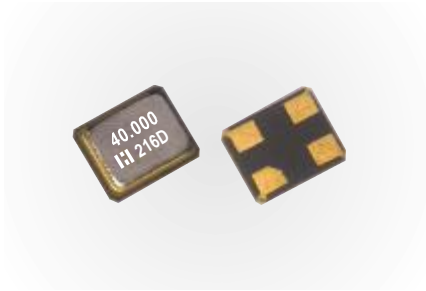


## • E1SB Series

## 2016 Seam Sealing Crystal



### FEATURES

- Very compact and thin (2.0\*1.6\*0.5mm )
- Frequency range of 16 to 96.0M with Fund
- Ideal for smartphone applications with limited design space, miniaturized wireless module devices, RFID application, and other consumer based products
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder

### Electrical Specifications

Item	Type	E1SB				
		16 to 18.9 MHz	19 to 24.9 MHz	25 to 29.9 MHz	30 to 62.5 MHz	63 to 96.0 MHz
Frequency Range	F0	16 to 18.9 MHz	19 to 24.9 MHz	25 to 29.9 MHz	30 to 62.5 MHz	63 to 96.0 MHz
Mode of Vibration		Fundamental				
Load Capacitance	CL	6 to 16pF				
Frequency Tolerance	$\Delta$ F/ F0	$\pm 10\text{ppm}, \pm 15\text{ppm}, \pm 30\text{ppm}$ (At 25°C)				
Equivalent Series Resistance	ESR	200 $\Omega$ max.	100 $\Omega$ max.	80 $\Omega$ max.	60 $\Omega$ max.	40 $\Omega$ max.
Temperature Stability	TC	$\pm 10\text{ppm}, \pm 15\text{ppm}, \pm 30\text{ppm}$ (Refer to 25°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	2pF max.				
Insulator Resistance	IR	500M $\Omega$ min. (At 100VDC)				
Drive Level	DL	50 $\mu$ W(100 $\mu$ 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)

