- -55 to +125°C Temp Range
- 5 x 3.2 mm Footprint
- Pb Free/RoHS Compliant

ECX-53B-DU
SMD CRYSTAL

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-53B-DU			UNITS
		MIN	TYP	MAX	
Frequency Range		10.000		150.000	MHz
Frequency Tolerance	at +25°C			± 30	ppm
Frequency Stability	-55 to +125°C			± 100	ppm
Shunt Capacitance				5	pF
Load Capacitance	Specify in P/N	8	20	Series	pF
Drive Level				300	µW
Operating Temperature		-55		+125	°C
Storage Temperature		-55		+125	°C
Aging (Per Year)	@ +25°C ±3°C			±5	ppm

EQUIVALENT SERIES RESISTANCE/MODE OF OSCILLATION

FREQUENCY RANGE (MHz)	MODE OF OSC	MAX ESR Ω	FREQUENCY RANGE (MHz)	MODE OF OSC	MAX ESR Ω
10.000 ~ 15.999	Fundamental	80	24.000 ~ 50.000	Fundamental	30
16.000 ~ 19.999	Fundamental	60	50.100 ~ 59.999	3rd Overtone	100
20.000 ~ 23.999	Fundamental	40	60.000 ~ 150.000	3rd Overtone	80

DIMENSIONS (mm)

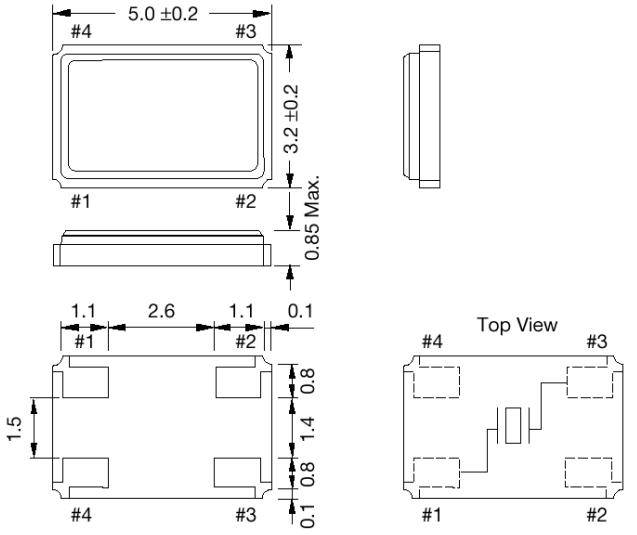

Figure 1) Top, Side, Bottom and End views

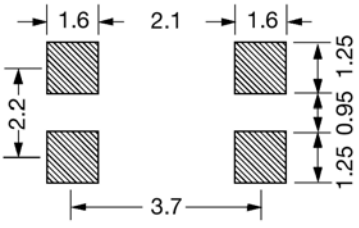

Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE: Example ECS-200-20-30B-DU

ECS - Frequency Abbreviation -	Load Capacitance	- Package	- Stability	Temperature
200 = 20.000 MHz See P/N Guide	20 =20 pF S=Series	30B = ECX-53B	D= ± 100 ppm	U= -55 ~ +125°C

1105 South Ridgeview Road • Olathe, KS 66062 • Phone: 913.782.7787 • Fax: 913.782.6991 • www.ecsxtal.com