

## **CERAMIC SEAM SEALED SURFACE MOUNT PACKAGE - XCS53 Series**

#### **FEATURES**

- RoHS Compliant (Pb-Free), Industry de factor Standard Footprint
- Ultra Miniature Design (5 x 3.2 mm) with 1.0 mm Height Maximum
- AT-cut Crystal, High Precision and Excellent Aging
- Excellent for High Density Surface Mounting

### **SPECIFICATIONS**

**Frequency Range** 8 MHz to 250 MHz

1 = Fundamental (8 to 155 MHz); 3 = 3rd Overtone (70 to 150 MHz) Resonance Mode

±3 ppm / year Maximum

-40°C to 85°C

5 = 5th Overtone (150 to 250 MHz)

Calibration Tolerance @25°C

Frequency Stability Ref @25°C

**Temperature Range** 

**Crystal Aging** 

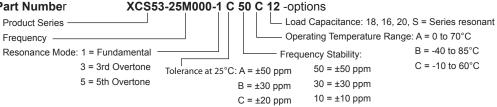
Storage Temperature

Load Capacitance (CL)

CL = 12 pF (Standard), 16 pF, 18 pF, others, or S = Series resonant **Shunt Capacitance** 7.0 pF Maximum

**Drive Level** 0.1 mW Maximum

# Creating a Part Number



 $A = \pm 50 \text{ ppm}$ ;  $B = \pm 30 \text{ ppm}$ ;  $C = \pm 20 \text{ ppm}$ ;  $D = \pm 15 \text{ ppm}$ ;  $E = \pm 10 \text{ ppm}$ 

 $50 = \pm 50$  ppm;  $30 = \pm 30$  ppm;  $10 = \pm 10$  ppm;  $5 = \pm 5$  ppm

 $A = 0^{\circ}C$  to  $70^{\circ}C$ ;  $B = -40^{\circ}C$  to  $85^{\circ}C$ ;  $C = -10^{\circ}C$  to  $60^{\circ}C$ 

### **Equivalent Series Resistance**

Frequency (MHz)	Mode	Max ESR (Ohms)
8.000 - 9.999	Fund	120
10.000 - 11.999	Fund	80
12.000 - 15.999	Fund	60
16.000 - 155.000	Fund	40
70.000 - 150.000	3rd O/T	80
150.000-250.000	5th O/T	80

# **OUTLINE DRAWING**

