# 85SMX CRYSTALS

#### **ISSUE 2: 7 SEPTEMBER 1999**

## **Delivery Options**

 Common frequencies are available from stock. Please see p142 for details

#### Holder Style

85SMX surface mount crystals are plastic encapsulated

#### **General Specifications**

- Load Capacitance (C<sub>L</sub>): 12.5pF standard
- Drive Level: 1.0µW max

#### **Packaging**

 85SMX surface mount crystals are available packaged individually or on tape and reel

## **Standard Frequencies**

32.0kHz, 32.7680kHz, 38.0kHz, 40.0kHz, 44.10kHz, 60.0kHz, 75.0kHz, 76.80kHz, 77.50kHz, 77.5030kHz, 77.5050kHz, 96.0kHz, 100.0kHz, 150.0kHz, 153.60kHz, 200.0kHz, 307.20kHz, 614.40kHz

# **Standard Frequency Tolerances and Stabilities**

■ ±30ppm, ±50ppm, ±100ppm

## **Operating Temperature Ranges**

■ -20 to 70°C -40 to 85°C

#### Storage Temperature Range

■ -55 to 125°C

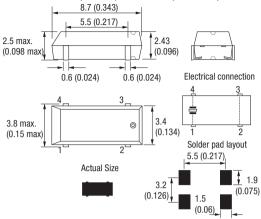
#### Marking

Includes Frequency

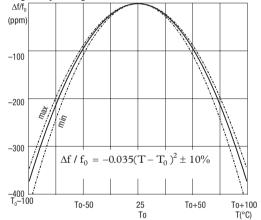
# **Minimum Order Information Required**

Frequency + Holder + Frequency Tolerance @ 25°C + Operating Temperature Range + Circuit Condition

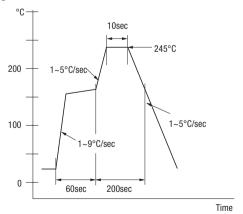
## Outline in mm (inches) - 85SMX (scale 3:1)



### **Frequency Temperature Curve**



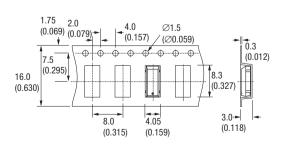
#### **Typical Solder Condition - Infrared Reflow**



# Electrical Specification - maximum limiting values

Frequency	Frequency Tolerance @ 25°C ±2°C	Operating Temperature Range	Frequency Stability	ESR Max	Vibration Mode
30.0 to 150.0kHz	±30ppm to ±100ppm	–20 to 70°C	–80ppm	55kΩ	Fundamental X cut
		–40 to 85°C	-160ppm		
150.0 to 615.0kHz ±	±100ppm to ±1000ppm	–20 to 70°C	-80ppm	50kΩ	Fundamental X cut
		–40 to 85°C	-160ppm		

# Outline in mm (inches) - Tape



# Outline in mm (inches) - Reel (scale 1:8)

