



5.0x3.2mm Hi-Stability SMD Oscillators - Type SQ1

Pb-Free & RoHS Compliant Model Designator Key & Specifications

*Standard Op Temp Range = -40°C to +85°C

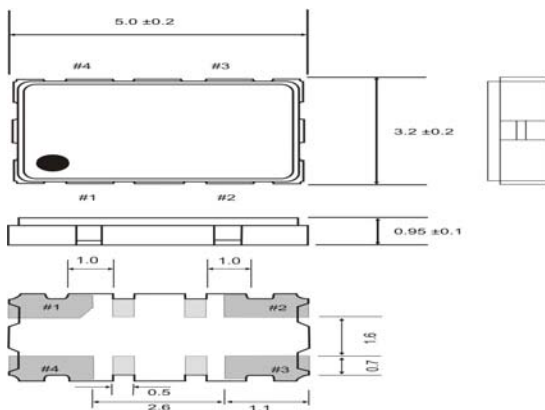
| Base Model | Input Voltage | Freq Stability | Operating Temp. Range |
|-------------------------------|---------------|--------------------------|-----------------------|
| SQ1 (5.0x3.2mm & Tristate) | 33 = 3.3V | G = ±15PPM E = ±10PPM | I = -40°C to +85°C |
| | 25 = 3.0V | | |
| | 25 = 2.5V | | |

| Operating Conditions | |
|----------------------|----------------|
| Storage Temp Range | -40°C to +85°C |

Electrical Characteristics (Ta = -30°C to +70°C, V_{DD} = 3.3V, 3.0V, & 2.5V, CL = 15pF)

| Parameter | | Condition | Frequency Range (MHz) | Specifications | | |
|----------------------------------|--------------------|---------------------------------------|-----------------------|----------------|------------|------------|
| | | | | SQF1-33 | SQ1-30 | SQ1-25 |
| Input Current (I _{DD}) | | 15pF Load | 4.0 ~ 54.00 | 7mA Max. | | |
| Symmetry | | @ 50% V _{DD} | | 45/55% | | |
| Output Voltage | (V _{OL}) | "0" Level | | 0.33V Max. | 0.30V Max. | 0.25V Max. |
| | (V _{OH}) | "1" Level | | 2.97V Min. | 2.70Min. | 2.25 Min. |
| Rise Time | (T _R) | 10% to 90% V _{DD} | | 5nS Max | | |
| Fall Time | (T _F) | 90% to 10% V _{DD} | | 5nS Max | | |
| Output Current | (I _{OL}) | "0"- Level | | 2mA Max | | |
| | (I _{OH}) | "1"- Level | | 2mA Min. | | |
| Stand-By Current | | V _{IL} ≤ 30% V _{DD} | | 10µA Max. | | |
| Load | | Cmos | | 15pF | | |
| Start-Up Time | | | 5mS Max. | | | |
| Phase Noise | | at 10kHz Offset | -140dBc/Hz Typ. | | | |

Dimensions (mm)



| Enable/Disable Function | |
|-------------------------|-----------------|
| Control (Pin #1) | OUTPUT (Pin #3) |
| Open | Active |
| "1" (VIH ≥ 70%VDD) | Active |
| "0" (VIL ≤ 30%VDD) | High Z |

| Pin Connections | |
|-----------------|-----|
| #1 | E/D |
| #2 | VSS |
| #3 | OUT |
| #4 | VDD |

