

Main Feature

- RoHS compliant
- Low Profile
- Cross Ref. No. ABL5 and more
- 3 pads available



11.4*4.7*4.0mm

Application

- Communication, Test equipment
- Computers, Modems, Microprocessors

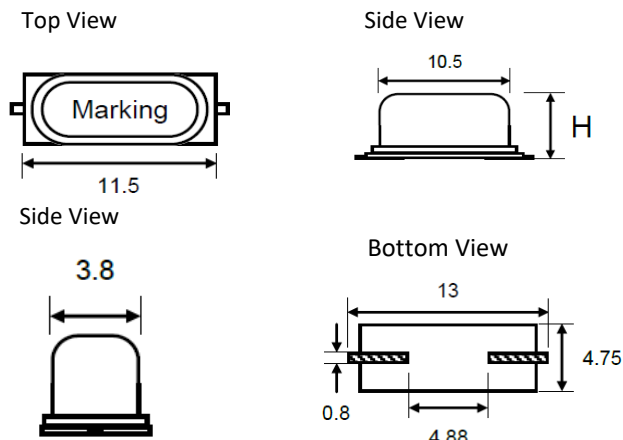
Standard Specification

Frequency Range: 3.2000MHz ~ 100.000Hz
 Frequency Tolerance (at 25°C): ±10~ ±50ppm
 Load Capacitance: 18pF (Typ.) or Specify
 Frequency Stability: ±10 ~ ±100ppm
 Operating Temperature: -20°C~ +70°C and -40°C~ +85°C
 Equivalent Series Resistant: see Table 1
 Storage Temperature: -55 °C~ +125°C (typ.)
 Aging (at 25°C): ±5ppm Max.
 Shunt Capacitance (C0): 7.0pF Max.
 Drive Level: 100µW Typ.
 Package:Tape/Reel

Standard ESR Table 1

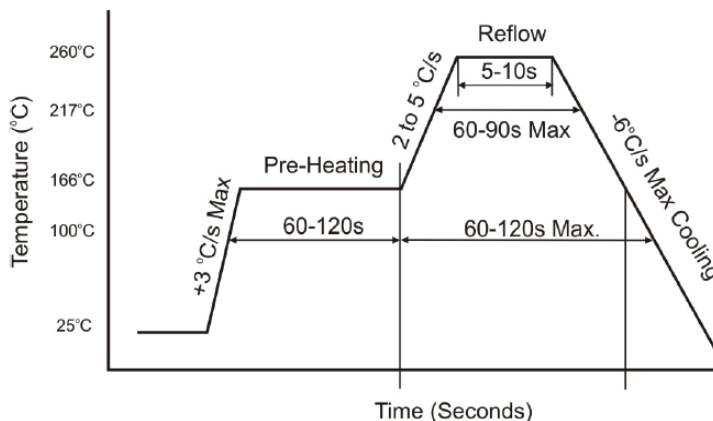
| Frequency Range in MHz | ESR Value in Ohm Max. |
|------------------------|-----------------------|
| 3.2000~3.5780 (Fund.) | 250 |
| 3.579000~3.999(Fund.) | 150 |
| 4.0000~4.9999(Fund.) | 120 |
| 5.00005.999(Fund) | 100 |
| 6.0000~9.999(Fund) | 80 |
| 10.0000~13.999(Fund) | 50 |
| 14.0000~25.999(Fund) | 40 |
| 26.000~39.999(3rd OT) | 100 |
| 40.000~100.000(3rd OT) | 80 |

Dimension (Unit: mm)



CSM2: H= 4.0+/-0.2
 CSSM2: H=3.0+/-0.2

Reflow Profile Condition(260 °C Max.)



TGS part No. Guide

| | | | | | | | | | | |
|-----|------|-------|-----|-----|-----|-----|----|---|----|----|
| TGS | CSM2 | 12M0A | 50- | 18- | 50- | 40- | 80 | T | LF | XX |
| | 1 | 2 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

- 1) CSM2: TGS Part Family No.
- 2) 12M0: Frequency Range in MHz or specify
- 3) Oscillator Mode- A: AT- Cut Fund. ; B: Bt-Cut; C: 3rd OT
- 4) 50: Frequency Tolerance in +/-50ppm or specify
- 5) 18: Load Capacitor in pF or specify
- 6) 50: Frequency Stability in +/-50 ppm or specify
- 7) 40: Operating Temp. in -40°C~ +85°C or specify
- 8) 80: ESR Max. in 80 ohm or see table 1
- 9) T: Tape /Reel
- 10) LF: RoHS compliant
- 11) XX: 2 letters as Internal Control Code