

**Main Feature**

- RoHS/RoHS II compliant, Pb in High Temp. Solder (exempt per RoHS 2002/95/EC Annex (7))
- Cross Ref. No. CM309S, MA-406, ABSM2 and more



**Application**

- Communication Equipment
- Measurement Instrument etc.

**RoHS/RoHS II Compliant**

Pb in high temperature solder (exempt per RoHS 2002/95/EC Annex (7))

12.5\*4.6\*3.7mm

**Standard Specification**

Frequency Range: 3.57954500MHz ~ 70.000Hz  
 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: -40 °C~ +85°C (typ.)  
 Aging (at 25°C): ±5ppm Max.  
 Shunt Capacitance (C0): 7.0pF Max.  
 Drive Level: 100µW Typ.  
 Package: 1000pcs/Reel

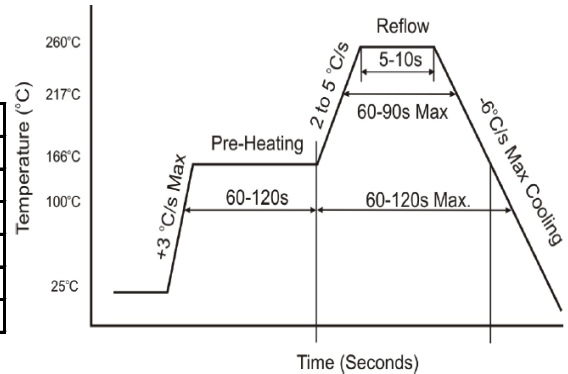
**Standard ESR Table 1**

Frequency Range in MHz	ESR Value in Ohm Max.
3.579545~3.999	200
4.000~6.000	150
6.100~9.999	120
10.000~11.999	80
12.000~70.000	70

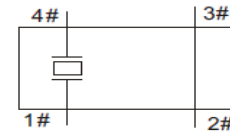
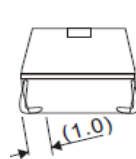
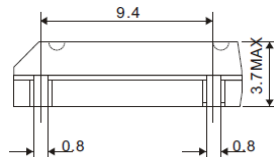
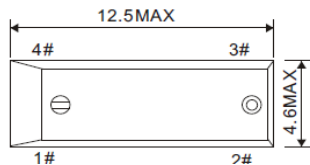
**Regular Frequency List in MHz**

3.5795	6.0000	8.1920	12.2880	17.7345	24.5760	32.7680
3.6864	6.1440	9.2160	13.5000	18.0000	25.0000	34.0000
4.0000	6.4000	9.6000	14.3182	18.4320	25.1750	40.0000
4.0320	7.3728	9.8304	14.7456	19.2000	27.0000	40.9600
4.1943	7.6800	10.2400	16.0000	20.0000	28.6364	48.0000
4.9152	8.0000	11.0592	16.3840	22.1184	30.0000	49.1520
5.0000	8.0000	12.0000	16.3934	24.0000	32.0000	60.0000

**Reflow Profile Condition(260 °C Max.)**



**Dimension ( Unit: mm)**



Pin 1 and Pin 4: Xtal, Pin 2 and Pin 3: Ground

**TGS part No. Guide**

TGS	CCME	25M0A	50-	18-	50-	40-	70	T	LH	XX
	1	2 3	4	5	6	7	8	9	10	11

- 1) CCME: TGS Part Family No.
- 3) Oscillator Mode- A: AT- Cut Fund. ; B: Bt-Cut; C: 3rd OT
- 5) 18: Load Capacitor in pF or specify
- 7) 40: Operating Temp. in -40°C~ + 85°C or specify
- 9) T: Tape /Reel
- 11) XX: 2 letters as Internal Control Code

- 2)25M0: Frequency Range in MHz or specify
- 4) 50: Frequency Tolerance in +/-50ppm or specify
- 6) 50: Frequency Stability in +/-50 ppm or specify
- 8) 70: ESR Max. in 70 ohm
- 10) LH: RoHS/RoHS II compliant, Pb in High Temp. Solder (exempt per RoHS 2002/95/EC Annex (7))