

PART CODE: XB7M372800S412

SPECIFICATION SHEET

| SPECIFICATION SHEET NO. | Q0301- XB7M372800S412 |
|-------------------------|---|
| DATE | March 01, 2023 |
| REVISION | A0 |
| DESCRIPITION | MHz SMD Crystal, Seam Seal, L7.0*W5.0*H1.1mm, 4 Pads, CM75 series 7.37280MHz, Tolerance +/-30ppm, Load Capacitor 12pF, Frequency stability +/-30ppm @Operating Temp. Range -40°C ~+85°C, ESR 110 ohm Max, Reflow Profile Condition 260 °C Max. Tape/Reel, 1000pcs/Reel RoHS/RoHS III compliant |
| CUSTOMER | |
| CUSTOMER PART NUMBER | |
| CROSS REF. PART NUMBER | |
| ORIGINAL PART NUMBER | TGS CM75 7M3728A30-12-30-40-110TLF |
| PART CODE | XB7M372800S412 |

| VENDOR APPROVE | | | |
|-------------------------|--|--------------------------|---|
| Issued/Checked/Approved | So mp or per so that the second secon | Ruby Zhang Control | Composition Jack Jack Jack Jack Jack Jack Jack |
| DATE: March 01, 2023 | | | |

 CUSTOMER APPROVE

 DATE:

 03/01/2023

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PART CODE: XB7M372800S412

SMD CRYSTAL 7050 TYPE 4 PADS

MAIN FEATURE

- SMD Crystal, Seam Seal, L7.0*W5.0*H1.1mm, 4 pads
- Low cost, High precision, High frequency stability
- Reflow Profile Condition 260 °C Max.
- Cross more competitors part
- RoHS/RoHS III compliant

APPLICATION

- Bluetooth, wireless communication set
- Communication Electronics

PART CODE GUIDE

| ХВ | 7M372800 | S | 412 |
|----|----------|---|-----|
| 1 | 2 | 3 | 4 |

1) XB: Part family Code for SMD Crystal, Seam Seal, L7.0*W5.0*H1.1mm, 4 pads (CM75)

2) 7M372800: Frequency range code for 7.37280MHz

3) S: SMD type, Package Tape/Reel, 1000pcs/Reel

4) 412: Specification code for original part No.: TGS CM75 7M3728A30-12-30-40-110TLF







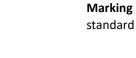


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DIMENSION (Unit: mm)

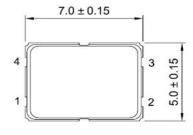
Image for reference



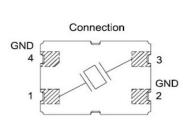


0.25

CM75



Connection #1 Crystal

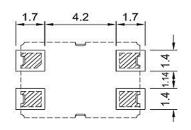


#2 Ground #3 Crystal

, #4 Ground



Recommend Pad Layout



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SMD CRYSTAL 7050 TYPE 4 PADS

ELECTRICAL PARAMETERS

| Parameter | | Part No. Symbol | Units | Value | | Condition | |
|--|-------------------------|--------------------|--------------------|---------------|----------------|------------|-----------------------|
| | | Symbol | | Min. | Typical | Max. | - |
| Original | Manufacturer | TGS | | TGS | Crystals | | |
| Holder T | уре | CM75 | SMD Crysta | l, Seam Seal, | L7.0*W5.0*H1.1 | mm, 4 pads | |
| Frequen | cy Range | 7M3728 | MHz | | 7.37280 | | |
| Mode of | f Oscillation | А | | | AT Fundamenta | al | |
| Frequen | cy Tolerance | 30 | ppm | -30 | | +30 | @25°C |
| Load Ca | pacitance | -12 | pF | | 12 | | |
| Stability Operatio | over on Temperance | -30 | ppm | -30 | | +30 | |
| Operatio | on Temperance | -40 | °C | -40 | | +85 | |
| Storage | Temperance | | °C | -55 | | +125 | |
| Equivale Resistan | ent Series ice (ESR) | -110 | Ω | | | 110 | |
| Drive Le | vel | | μW | | | 300 | |
| Shunt Ca | apacitance (CO) | | pF | 0 7.0 | | | |
| Motiona (C1) | al Capacitance | | fF | N/A | | | |
| DLD2 | | | Ω | N/A | | | |
| FLD2 | | | ppm | N/A | | | |
| RDL2 | | | Ω | N/A | | | |
| SPDB | | | dB | N/A | | | |
| Aging | | | ppm/year | | | ±3 | @1 st year |
| Insulatio | on Resistance | | MΩ | 500 | | | @100VDC ±15VDC |
| Package | | Т | Tape/Reel | | | | |
| | RoHS Status | LF | RoHS III compliant | | | | |
| Others | Add Value | | N/A | | | | |
| Internal Control Code <mark>*</mark> | | | N/A | | | | |

Note: 1) Original Part Number: TGS CM75 7M3728A30-12-30-40-110TLF

2) * Internal Control Code- 2 letter or digits; Blank: N/A 03/01/2023

00/01/2020



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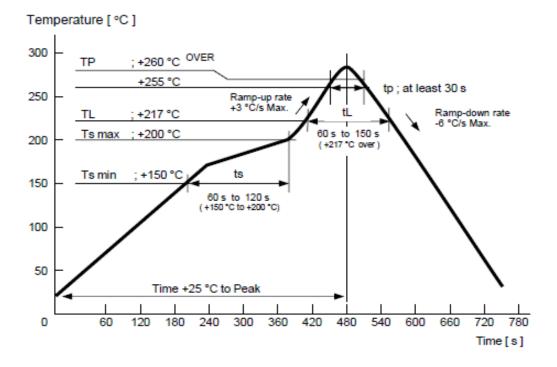
MECHANICAL PERFORMANCE

| Item | Condition | Standard |
|----------------------------------|---|---|
| Drop characteristics | Free drop from 75cm height on a hard wooden board for 3 times. (Board is thickness more than 30 mm.) | Frequency change: ≤5ppm Rr as specification |
| Shake characteristics | Shake frequency 10~55Hz, cyc1~2 minutes, swing 1.5mm, direction x/y/z, all 30 minutes, test after 1 hours. | Frequency change: ≤5ppm Rr as specification |
| Airproof characteristics | Put crystal into the pressure cabin with alcohol, keep pressure 0.4~0.5mpa 10 minutes, then take out and blow for 5 minutes | IR≥500MΩ |
| Weld characteristics | 260±5°C, 3 seconds | 90% exhibit tin ok |
| Humidity characteristics | +40±2°C & 90%~95% R.H. 250 hours | Frequency change: ≤5ppm Rr as specification |
| Low temperature characteristics | -30 \pm 2°C, 250 hours, put in room temperature, test after 1 hours. | Frequency change: ≤5ppm Rr as specification |
| High temperature characteristics | +85 \pm 2°C, 250 hours, put in room temperature, test after 1 hours. | Frequency change: ≤5ppm Rr as specification |
| Temperature cycling | -30 \pm 3°C/30 \pm 3 min~+85 \pm 2°C/30 \pm 3min, 5 cycles | Frequency change: ≤5ppm Rr as specification |



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SUGGESTED REFLOW PROFILE (For Reference Only)



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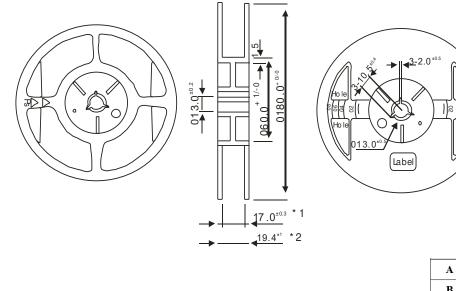
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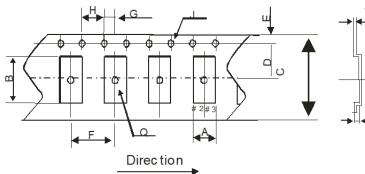


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TAPE/REEL (Unit: mm)

All Devices are packed in accordance with EIA standard RS-481-2 and specifications., 1000pcs/Reel





| Α | 5.4 ^{±01} | |
|---|----------------------|--|
| В | $7.4^{\pm 0.1}$ | |
| С | 16.0 ^{±0.2} | |
| D | 7.5 ^{±0.1} | |
| Е | $1.75^{\pm 0.1}$ | |
| F | 8.0 ^{±0.1} | |
| G | 2.0 ^{±0.1} | |
| н | 4.0 ^{±0.1} | |
| J | $1.55^{\pm 0.05}$ | |
| К | $1.4^{\pm 0.1}$ | |
| Q | 1.6+0.1/0 | |
| Т | $0.3^{\pm 0.05}$ | |

| Item | | Empty Space |
|--------------|---------------|----------------|
| Tana Loador | Cover Tape | Min.500mm |
| Tapa Leader | Empty Pockets | Min.20 pockets |
| Tape Trailer | Cover Tape | Min.0mm |
| | Empty Pockets | Min.40mm |

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