

**SPECIFICATION SHEET**

|                                |  |
|--------------------------------|--|
| <b>SPECIFICATION SHEET NO.</b> | Q0119-RC65M53600S002   |
| <b>DATE</b>                    | Jan.19, 2023   |
| <b>REVISION</b>                | A1   |
| <b>DESCRIPTION</b>             | <p>SMD Oscillator, 0705 Type, L7.0*W5.0*H1.50mm, 4 Pads, COM75 series<br/>         65.53600MHz, 3.3V, +/-50ppm, Symmetry 40/60,<br/>         Operating Temp. Range -40°C ~+85°C, Reflow Profile Condition 260 °C Max.<br/>         1-10TTL//15pF, Supply Current 30mA Max.<br/>         Tristate function - Disable,<br/>         Packed in Tape/Reel, 1000pcs/Reel<br/>         RoHS/RoHS III compliant</p> |
| <b>CUSTOMER</b>                |  |
| <b>CUSTOMER PART NUMBER</b>    |  |
| <b>CROSS REF. PART NUMBER</b>  |  |
| <b>ORIGINAL PART NUMBER</b>    | TGS COM7530BGH00TLF-65M536   |
| <b>PART CODE</b>               | RC65M53600S002   |

**VENDOR APPROVE**

Issued/Checked/Approved



DATE: Jan.19, 2023

**CUSTOMER APPROVE**

DATE:

1/19/2023

**MHZ SMD OSCILLATOR 0705 TYPE 4 PADS**

**MAIN FEATURE**

- SMD Package, Seam Sealed, 0705 Type, L7.0\*W5.0\*H1.50mm, 4 Pads,
- Low noise and Low current
- Industry standard
- Reflow Profile Condition 260 °C Max.
- Cross more competitors part
- RoHS/RoHS III compliant



**APPLICATION**

- PDA, PND, DSC, Smart phone, WiLAN, Bluetooth and more
- Communication Electronics

**PART CODE GUIDE**

**RFQ**

[Request For Quotation](#)

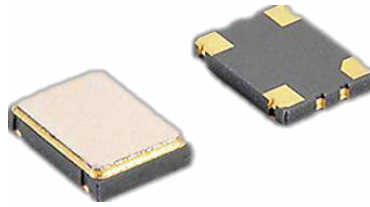
| RC | 65M53600 | S | 002 |
|----|----------|---|-----|
| 1  | 2        | 3 | 4   |

- 1) RC: Part family Code for SMD Oscillator, 0705 Type, L7.0\*W5.0\*H1.50mm, 4 Pads, COM75 series
- 2) 65M53600: Frequency range code for 65.5360MHz
- 3) S: SMD type, Package Tape/Reel, 1000pcs/Reel
- 4) 002: Specification code for original part No.: **TGS COM7530BGH00TLF-65M5360**

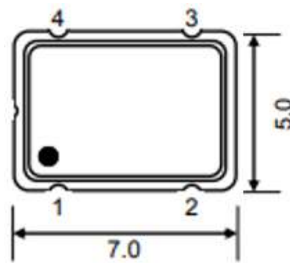
**MHZ SMD OSCILLATOR 0705 TYPE 4 PADS**

**DIMENSION (Unit: mm, Tol. +/-0.15mm)**

Image for reference

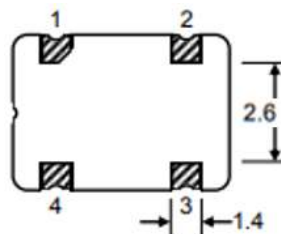


COM75



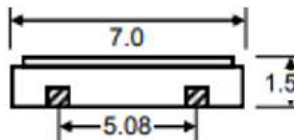
**Marking**

Line 1: 65.5360  
Line 2: Special Code

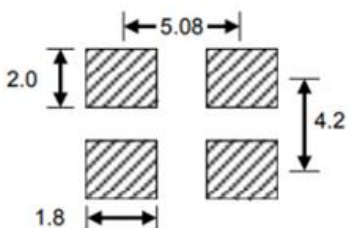


**Pin Function**

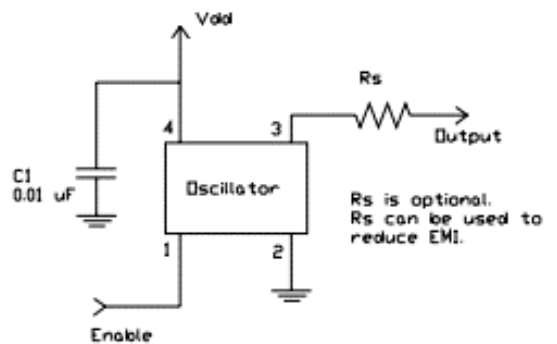
- #1 Disable
- #2 Ground
- #3 Output
- #4 VDD



**Recommend Pad Layout**



**Circuit Principle**



**MHZ SMD OSCILLATOR 0705 TYPE 4 PADS**
**ELECTRICAL PARAMETERS**

| Parameter               |                         | Part No. Symbol | Units   | Value                       |         |                     | Condition                    |
|-------------------------|-------------------------|-----------------|---|-----------------------------|---------|---------------------|------------------------------|
|                         |                         |                 |   | Min.                        | Typical | Max.                |                              |
| Original Manufacturer   |                         | TGS             | TGS Crystals  |                             |         |                     |                              |
| Holder Type             |                         | COM75           | SMD Oscillator, 0705 Type,<br>L7.0*W5.0*H1.50mm, 4 Pads |                             |         |                     |                              |
| Supply Voltage          |                         | 3               | V   | 3.3                         |         | +/-10%              |                              |
| Enable/Disable Function |                         | 0               |   | Tristate function - Disable |         | @ Control via pin 1 |                              |
| Overall Freq. Tolerance |                         | B               | ppm   | -50                         |         | +50                 | @25°C                        |
| Operating Temp. Range   |                         | G               | °C  | -40                         |         | +85                 |                              |
| Storage Temp. Range     |                         |                 | °C  | -55                         |         | +125                |                              |
| Symmetry                |                         | H               | %   | 40                          |         | 60                  |                              |
| Output                  | V OH                    |                 | V   | 90%                         |         |                     | High (Logic "1")             |
|                         | V OL                    |                 | V   |                             |         | 10%                 | Low (Logic "0")              |
|                         | Load                    |                 | pF  | 15                          |         |                     |                              |
| Output Waveform         |                         | 00              |   | TTL                         |         |                     | @OutputLoad<br>1-10TTL//15PF |
| Startup Time            |                         |                 | ms  |                             |         | 10                  |                              |
| Supply Current          |                         |                 | mA  |                             |         | 30                  |                              |
| Rise/ Fall time         |                         |                 | ns  |                             |         | 10                  |                              |
| Phase Jitter            |                         |                 | ps  |                             | N/A     |                     |                              |
| Aging                   |                         |                 | ppm/year  |                             |         | ±3                  | @1 <sup>st</sup> year        |
| Others                  | Package                 | T               | Tape/Reel, 1000pcs/Reel                                 |                             |         |                     |                              |
|                         | RoHS Status             | LF-             | RoHS III compliant                                      |                             |         |                     |                              |
|                         | Add Value               |                 | N/A   |                             |         |                     |                              |
|                         | Internal Control Code * |                 | N/A   |                             |         |                     |                              |
| Frequency Range         |                         | 65M5360         | 65.5360MHz  |                             |         |                     |                              |

Note: 1) Original Part Number: **TGS COM7530BGH00TLF-65M5360**

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

1/19/2023

**MHZ SMD OSCILLATOR 0705 TYPE 4 PADS**
**RELIABILITY**

| Test Items                             | Test Method And Conditions  | Reference Documents                       |
|--|---|---|
| High Temperature High Humidity Storage | Temperature: 85°C±3°C<br>Relative Humidity:85%RH<br>Time: 96 Hours  | JIS C5023                                 |
| High Temperature Storage               | Temperature: 125°C±3°C<br>Time: 96 Hours.   | MIL-STD-883E<br>Method 1005.8             |
| Low Temperature Storage                | Temperature: -40°C±3°C<br>Time: 96 Hours.   | MIL-STD-883E<br>Method 1013               |
| Thermal Shock                          | Temperature 1: -55°C±5°C<br>Temperature 2: 85°C±5 °C<br>Temperature change between T1 and T2 5 min<br>10cycles maintain T1 and T2 for 30 minutes each cycle | MIL-STD-202F<br>Method 107<br>Condition A |
| Resistance to Solder Heat              | Solder Temperature: 260°C±5°C<br>Time: 10±1 Seconds   | MIL-STD-202F<br>Method 210E               |
| Solderability                          | The solder pot temperature is 245±5°C , dwell time 5±0.5sec   | J-STD-002B                                |
| Drop Test                              | 3 Times Free Fall from 50cm height table to 3cm thickness hard wood board   | J-STD-002B                                |
| Mechanical Shock                       | Half sine wave,1000 G<br>3 Times for all 3 directions(X,Y Z)  | MIL STD 202F<br>Method 213B               |
| Vibration                              | Frequency Range: 10Hz ~ 55Hz<br>Amplitude: 0.75mm<br>2 Hours in each direction, total 6 Hours   | MIL-STD-883E<br>Method 2007.3             |
| Leakage Test                           | Take measurements with a helium Leakage detector<br>Leakage Rate≤1×10 <sup>-3</sup> Pa cm <sup>3</sup> /s   | MIL-STD-883E                              |

**MHZ SMD OSCILLATOR 0705 TYPE 4 PADS**

**SUGGESTED REFLOW PROFILE (For Reference Only)**

Total time: 200 Sec. Max. Solder melting point: 220°C

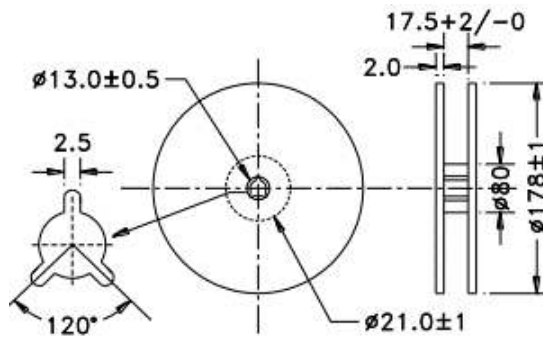
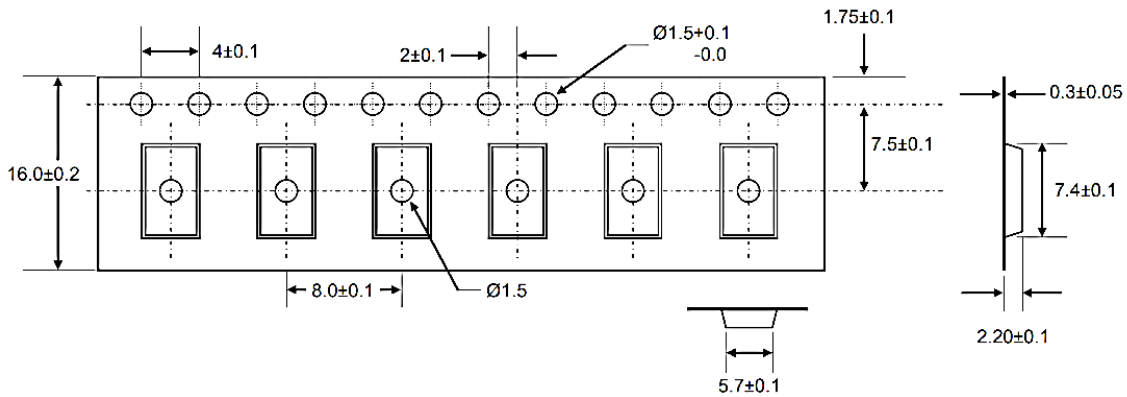


|   |                                    |                   |
|---|------------------------------------|-------------------|
| <b>Profile Feature</b>  |                                    | Pb-Free Assembly  |
| <b>Average Ramp-up Rate (Ts Max to Tp)</b>                        |                                    | 3°C/second Max    |
| <b>Preheat</b>  | <b>Temperature Min (Ts Min.)</b>   | 125°C             |
|   | <b>Temperature Max (Ts Max.)</b>   | 200°C             |
|   | <b>Time (ts Min. to ts Max.)</b>   | 60 ~ 180 seconds  |
| <b>Time maintained above</b>                                      | <b>Temperature (T<sub>L</sub>)</b> | 217°C             |
|   | <b>Time (t<sub>L</sub>)</b>        | 60 ~ 150 seconds  |
| <b>Peak/Classification Temperature (T<sub>p</sub>)</b>            |                                    | 260 °C            |
| <b>Time within 5°C of actual Peak Temperature (t<sub>p</sub>)</b> |                                    | 20 ~ 40 seconds   |
| <b>Ramp-down rate</b>   |                                    | 6 °C /Second Max. |
| <b>Time 25 °C to Peak Temperature</b>                             |                                    | 8 minutes Max.    |
| <b>Suggest reflow times</b>                                       |                                    | 3 Times Max.      |

**MHZ SMD OSCILLATOR 0705 TYPE 4 PADS**

**TAPE/REEL (Unit: mm)**

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



**DISCLAIMER**

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