

SPECIFICATION SHEET

SPECIFICATION SHEET NO.	N0504-RC41M66000S001
DATE	May 04, 2021
REVISION	A0
DESCRIPTION	SMD Oscillator, 0705 Type, L7.0*W5.0*H1.50mm, 4 Pads, COM75 series 41.6600MHz, 3.3V, +/-50ppm, Symmetry 45/55, Operating Temp. Range -20°C ~+70°C, Reflow Profile Condition 260 °C Max. HCMOS//15pF, Supply Current 15mA Max. Tristate function - Enable via Pad 1, Packed in Trape/Reel, 1000pcs/Reel RoHS/RoHS III compliant
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	TGS COM7531BFI03 TLF-41M660
PART CODE	RC41M66000S001

VENDOR APPROVE

Issued/Checked/Approved



DATE: May 04, 2021

CUSTOMER APPROVE

DATE:

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

RFQ
[Request For Quotation](#)

PART CODE GUIDE

RC	41M66000	S	001
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) 41M66000: Frequency range code for 41.66000MHz
- 3) S: SMD type, Package Tape/Reel, 1000pcs/Reel
- 4) 100: Specification code for original part No.: **TGS COM7531BFI03 TLF-41M660**

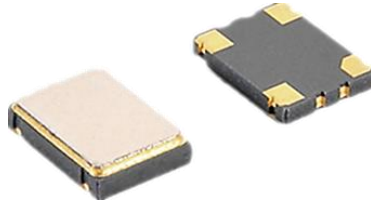
MORE FREQUENCY RANGE AVAILABLE (MHz)

2.0480	20.000	24.000	25.000	27.000	40.0000	48.000	50.000	100.00	125.000

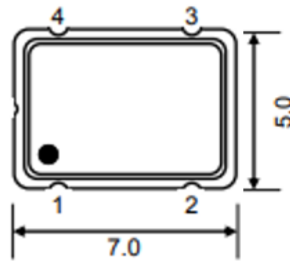
MHZ SMD OSCILLATOR 0705 TYPE 4 PADS

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

Image for reference

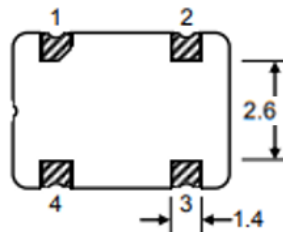


COM75



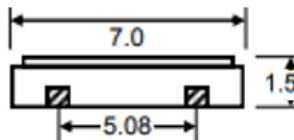
Marking

Line 1: BOMAR 3
Line 2: 41.660
Line 3: 1804

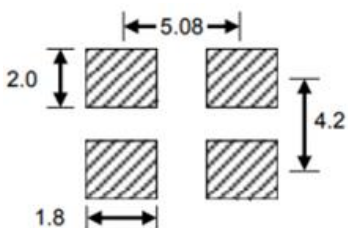


Pin Function

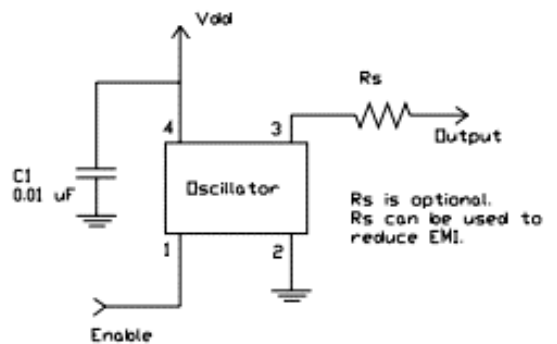
#1 Enable (Tri-State)
#2 Ground
#3 Output
#4 VDD



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, L7.0*W5.0*H1.50mm, 4 Pads				
Supply Voltage		3	V	3.3		+/-10%	
Enable/Disable Function		1		Tri-State		@ Control via pin 1	
Overall Freq. Tolerance		B	ppm	-50		+50	@25°C
Operating Temp. Range		F	°C	-20		+70	
Storage Temp. Range			°C	-55		+125	
Symmetry		I	%	45		55	
Output	V OH		V	90%			High (Logic "1")
	V OL		V			10%	Low (Logic "0")
	Load		pF	15			
Output Waveform		03		HCMOS			@OutputLoad 15pF
Startup Time			ms			10	
Supply Current			mA			15	
Rise/ Fall time			ns			10	
Phase Jitter			ps		N/A		
Aging			ppm/year			±3	@1 st 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		41M660	41.6600MHz				

Note: 1) Original Part Number: **TGS COM7531BFI03 TLF-41M660**

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

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 Relative Humidity:85%RH Time: 96 Hours	JIS C5023
High Temperature Storage	Temperature: 125°C±3°C Time: 96 Hours.	MIL-STD-883E Method 1005.8
Low Temperature Storage	Temperature: -40°C±3°C Time: 96 Hours.	MIL-STD-883E Method 1013
Thermal Shock	Temperature 1: -55°C±5°C Temperature 2: 85°C±5 °C Temperature change between T1 and T2 5 min 10cycles maintain T1 and T2 for 30 minutes each cycle	MIL-STD-202F Method 107 Condition A
Resistance to Solder Heat	Solder Temperature: 260°C±5°C Time: 10±1 Seconds	MIL-STD-202F 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 3 Times for all 3 directions(X,Y Z)	MIL STD 202F Method 213B
Vibration	Frequency Range: 10Hz ~ 55Hz Amplitude: 0.75mm 2 Hours in each direction, total 6 Hours	MIL-STD-883E Method 2007.3
Leakage Test	Take measurements with a helium Leakage detector Leakage Rate≤1×10 ⁻³ Pa cm ³ /s	MIL-STD-883E

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SUGGESTED REFLOW PROFILE (For Reference Only)

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

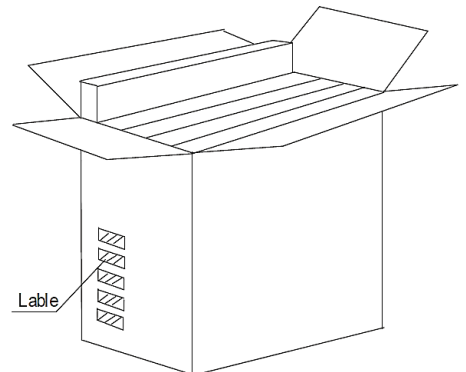
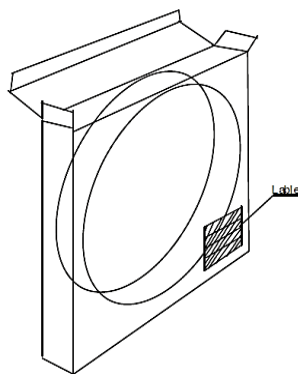
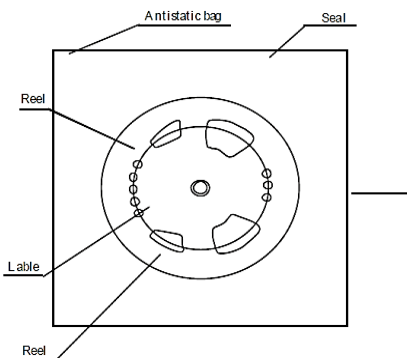
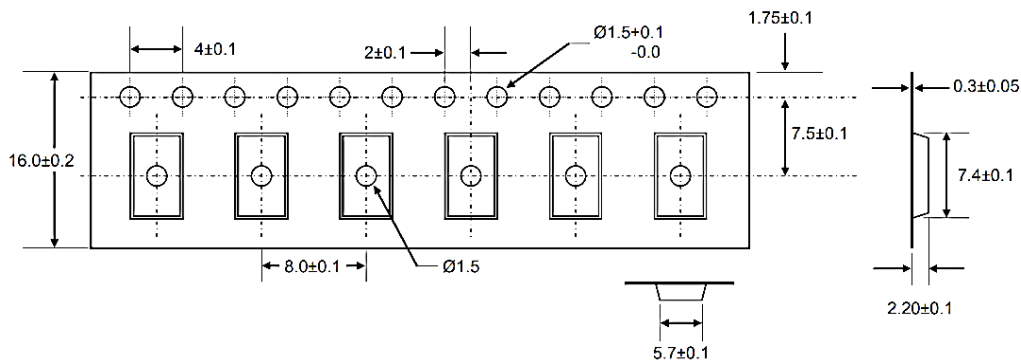
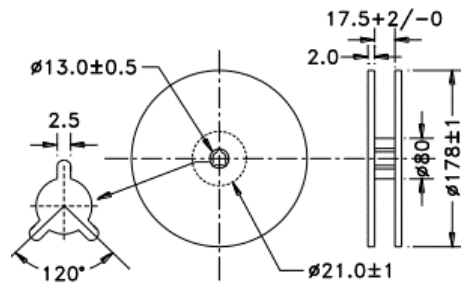


Profile Feature		Pb-Free Assembly
Average Ramp-up Rate (Ts Max to Tp)		3°C/second Max
Preheat	Temperature Min (Ts Min.)	125°C
	Temperature Max (Ts Max.)	200°C
	Time (ts Min. to ts Max.)	60 ~ 180 seconds
Time maintained above	Temperature (T_L)	217°C
	Time (t_L)	60 ~ 150 seconds
Peak/Classification Temperature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

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TAPE/REEL (Unit: mm)

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



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