

PART CODE: XB50M0000S418

SPECIFICATION SHEET

SPECIFICATION SHEET NO.	Q0301- XB50M00000S418
DATE	March 01, 2023
REVISION	A0
DESCRIPITION	MHz SMD Crystal, Seam Seal, L7.0*W5.0*H1.1mm, 4 Pads, CM75 series 50.0000MHz, Tolerance +/-30ppm, Load Capacitor 18pF, Frequency stability +/-30ppm @Operating Temp. Range -40°C ~+85°C, ESR 80 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 50M0A30-18-30-40-80TLF
PART CODE	XB50M00000S418

VENDOR APPROVE			
Issued/Checked/Approved	So mPopper	ComPoper Ruby Zhang Control Control Co	Compose Jack Thang Town
DATE: March 01, 2023			

 CUSTOMER APPROVE

 DATE:

 03/01/2023

 1

03/01/2023

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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	50M00000	S	418
1	2	3	4

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

2) 50M00000: Frequency range code for 50.0000MHz

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

4) 418: Specification code for original part No.: TGS CM75 50M0A30-18-30-40-80TLF





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SMD CRYSTAL 7050 TYPE 4 PADS



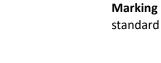


PART CODE: XB50M00000S418 SMD CRYSTAL 7050 TYPE 4 PADS

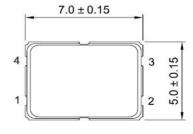
DIMENSION (Unit: mm)

Image for reference





CM75

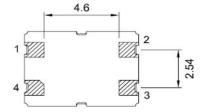


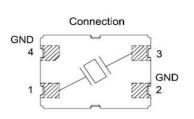
Connection

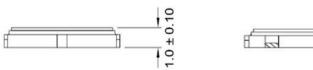
#1 Crystal #2 Ground

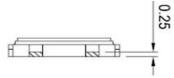


#4 Ground

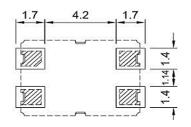








Recommend Pad Layout



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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	50M0	MHz		50.0000		
Mode of	Oscillation	А			AT Fundament	al	
Frequen	cy Tolerance	30	ppm	-30		+30	@25°C
Load Ca	pacitance	-18	pF		18		
Stability Operation	over on Temperance	-30	ppm	-30		+30	
Operatio	on Temperance	-40	°C	-40		+85	
Storage	Temperance		°C	-55		+125	
Equivale Resistan	ent Series .ce (ESR)	-80	Ω			80	
Drive Le	vel		μW			300	
Shunt Ca	apacitance (CO)		pF	0 7.0			
Motiona (C1)	Il 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 50M0A30-18-30-40-80TLF

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



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SMD CRYSTAL 7050 TYPE 4 PADS

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

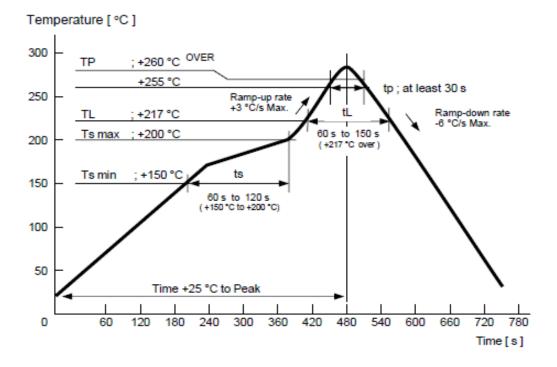
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SUGGESTED REFLOW PROFILE (For Reference Only)



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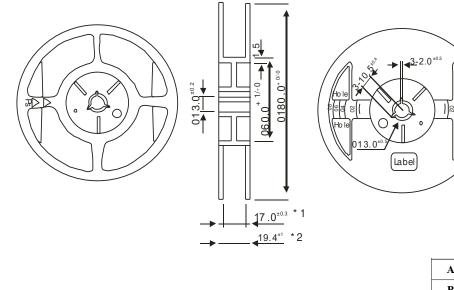
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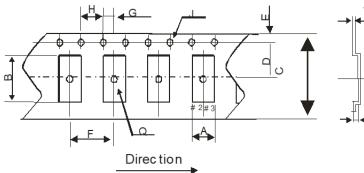


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TAPE/REEL (Unit: mm)

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





	1	
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	$8.0^{\pm 0.1}$	
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 ^{±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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