




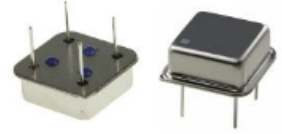
<b>SPECIFICATION SHEET NO.</b>	S0113 – RB60M00000L511	
<b>ORIGINAL MFG/PART NO.</b>	TGS Crystals/CO851BGI01 BLF-60M0000	
<b>NEXTGEN PART CODE</b>	RB60M00000L511	Indicate This Code For <a href="#">RFQ/Order</a>
<b>DATE</b>	Jan. 13, 2025	
<b>REVISION</b>	A2	Updated With Most Recent Data
<b>DESCRIPTION AND MAIN PARAMETRICS</b>	<p>MHz Thru-Hole Crystal Oscillator Half-Size/8pin Case 1212, RB series, Dimension L12.7*W12.7*H5.08mm</p> <p>60.000MHz, Supply Voltage 5.0V, Tolerance ±50ppm, Symmetry 45/55; Operating Temp. Range -40°C ~+85°C, Output Waveform HCMOS 15pF, Tristate Via Pin 1</p> <p>Package in Tube, 40pcs/Tube</p> <p>REACH/RoHS/RoHS III compliant</p>	
<b>CUSTOMER</b>		
<b>CUSTOMER PART NUMBER</b>		
<b>CROSS REF. PART NUMBER</b>	ILSL/HCOH-60.000000M-2937	
<b>MEMO</b>		

<b>VENDOR APPROVE</b>
Issued/Checked/Approved <div style="display: flex; justify-content: space-around; margin-top: 10px;">    </div>
Effective Date: Jan. 13, 2025

<b>CUSTOMER APPROVE</b>
Date:

## MAIN FEATURE

- MHz Thru-hole Crystal Oscillator, L12.7\*W12.7\*H5.08mm
- Industry-standard
- Hermetically Sealed Package For Reliability
- Tristate Function –Enable Via Pin 1
- Cross More Competitor’s Part
- REACH/RoHS/RoHS III Compliant



*Image shown is a representation only. Exact specifications should be obtained from the product dimension.*

## APPLICATION

- Communication Electronics



## ELECTRICAL CHARACTERISTICS

- See Page 6 For Electrical Parameters.
- All Products Parameters are Subject To NextGen Components’ Final Confirmation.

**HOW TO ORDER**

- Please Follow Up Part Code Guide And Indicate NextGen Part Code RB60M00000L511 For RFQ and Order.

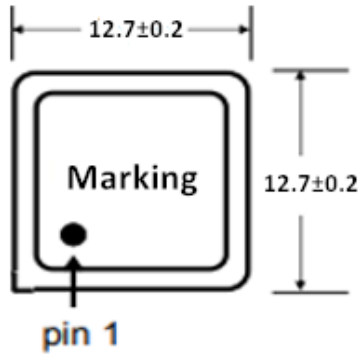
**PART CODE GUIDE**

**RFQ**  
[Request For Quotation](#)

CODE	NAME	KEY SPECIFICATION OPTION
RB	Series Code	MHz Thru-Hole Crystal Oscillator L12.7*W12.7*H5.08mm Half-Size/8 pin
60M0	Frequency Range Code	60M0: 60.0MHz or Custom Frequency Range
0000L	Internal Control Code	Letter A~Z, a~z or digits (0~9)
511	Parameters code	Special Parameters Code Letter A~Z, a~z or digits (1-9)
XX	Special/Custom Parameters Code	Blank: N/A XX: Letter A~Z, a~z or digits (0~9) for Special/Custom Parameters

**DIMENSION** (Unit: mm)

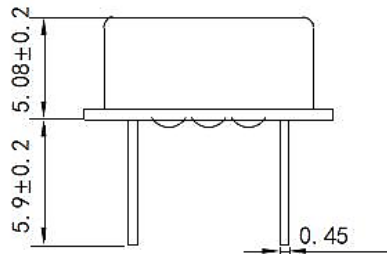
Top View



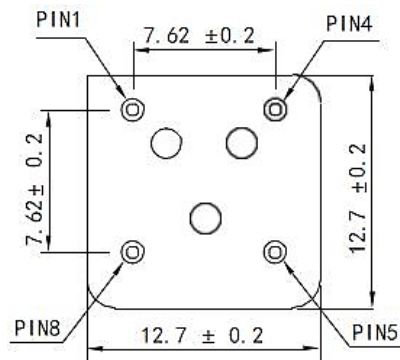
**Marking:**

Standard

Side View



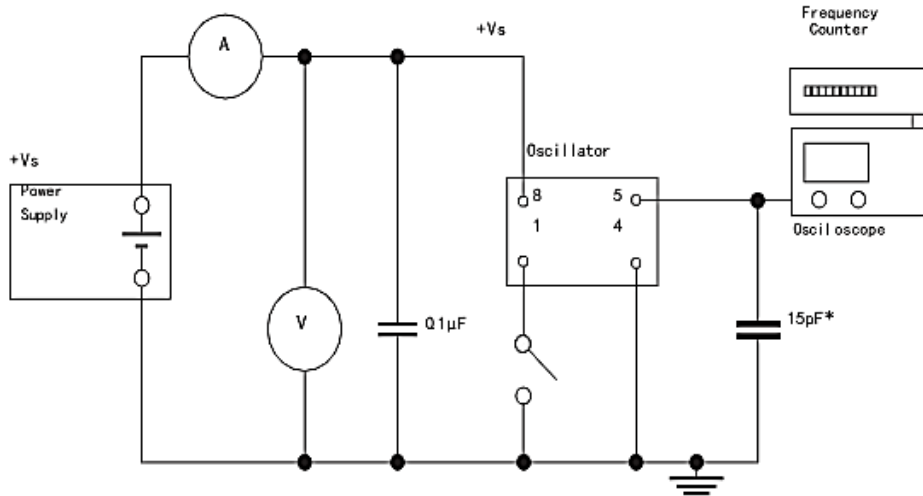
Bottom View



**Pin Function**

- # 1 Tristate Enable Via #1
- # 4 Ground
- # 5 Output
- # 8 VDD

**CIRCUIT PRINCIPLE** – Fort Reference



**GENERAL SPECIFICATION**

PARAMETER	SYMBOL	VALUE			UNIT	CONDITION
		MIN.	TYPE	MAX.		
Frequency Range	F0		60.000		MHz	
Supply Voltage			5.0±10%		V	at DC
Frequency Tolerance	$\Delta F/F0$		±50		ppm	at 25°C±10°C
Enable/Disable –Tristate Function		Tristate Function - Enable				@ Control via pin 1
Operating Temp. Range	TOPR	-40	-	+85	°C	Standard
Storage Temp. Range	TSTG	-40	-	+125	°C	
Symmetry	%	45		55		Max.@(1/2 VDC)
Output	VOH	90%			V	V <sub>DD</sub> (Min.)/2.4V
	VOL			10%	V	V <sub>DD</sub> (Max.)/0.4V
	Load	15			pF	
Output Waveform		HCMOS				@ Output Load 15pF
Startup Time				5	ms	
Supply Current				30	mA	
Rise/ Fall time				10	ns	@0.5-4.5 V <sub>DC</sub>
Phase Jitter	ps	standard				
Aging per year	Fa	-3	-	+3	ppm	@1st Year

**ENVIRONMENTAL AND TECHNICAL CONDITIONS**

TEST ITEMS	TEST METHOD AND CONDITIONS
Temperature Cycle	Mil-std 883, Method 1010, 10 Cycles -20° C To 85° C
Shock	Mil-std-202, Method 213, Test Condition C
Vibration	Mil-std-202, Method 204, Test Condition A
Resistance To	Mil-std-202, Method 210, Test Condition B
Humidity	85% Relative Humidity At 85° C 250 Hours
Gross Leak Test	Mil-std-883, Method 1014, Test Condition C
Fine Leak Test	Mil-std-883, Method 1014, Test Condition A
Terminal Strength	Mil-std-202, Method 211, Test Condition A And C
Moisture Resistance	Moisture Resistance Mil-std 202, Method 106, Omit Step 7b
Solderability	Mil-std-202, Method 208, 95% Coverage

## IMPORTANT NOTES AND DISCLAIMER

1. **ROHS COMPLIANCE:** The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for this product can be obtained at Download Center.
2. **REACH COMPLIANCE:** REACH substances of high concern (SVHCs) information is available for this product. Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained at Download Center.
3. All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.
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8. *NextGen* requires that customers first obtain an RMA (Returned Merchandise Authorization) number prior to returning any products. Returns must be made within 30 days of the date of invoice, be in the original packaging, unused and like-new condition. At the time of quoting or purchasing, a product may say that it is Non-Cancelable/ Non-Returnable (NCNR). These products are not returnable and not refundable.