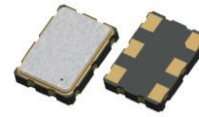


**Features**
**Typical Application**

- Typical 7.0 x 5.0 x 1.3 mm ceramic SMD package.
- Operation supply voltage: 1.8V, 2.5V and 3.3V
- FASTXO series, Fast delivery at any frequency
- Tri-state enable/disable.
- Frequency Stability  $\pm 20\text{ppm}$  over  $-40^{\circ}\text{C}$  to  $105^{\circ}\text{C}$
- Pb-free/RoHS compliant
- xDSL, WLAN, Fiber/10G-Bit Ethernet
- Notebook, PDA
- PC main board, VGA card


**BS0507A Series**

Parameter	3.3v		2.5V		1.8V		Unit	Conditions
	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation	VDD-5%	VDD+5%	VDD-5%	VDD+5%	VDD-5%	VDD+5%	V	
Frequency Range	1	200	1	200	1	125	MHz	
Vdd Sensitivity ( $\pm 5\%$ )	-2	2	-2	2	-2	2	ppm	
Supply Current (@15pf Loading)	-	27	-	27	-	25	mA	$1\text{MHz} \leq F_o < 30\text{MHz}$
	-	27	-	27	-	25		$30\text{MHz} \leq F_o < 75\text{MHz}$
	-	30	-	30	-	25		$75\text{MHz} \leq F_o < 125\text{MHz}$
	-	35	-	35	-	-		$125\text{MHz} \leq F_o < 170\text{MHz}$
	-	40	-	35	-	-		$170\text{MHz} \leq F_o \leq 200\text{MHz}$
Output Level	90% Vdd	-	90% Vdd	-	90% Vdd	-	V	Output High
	-	10%Vdd	-	10%Vdd	-	10%Vdd		Output Low
Transition Time: Rise/Fall Time	-	3	-	4	-	4	nSec	$1\text{MHz} \leq F_o < 10\text{MHz}$
	-	2	-	3	-	3		$10\text{MHz} \leq F_o < 125\text{MHz}$
	-	2	-	2	-	-		$125\text{MHz} \leq F_o < 200\text{MHz}$
Tri-State	Output Enable	$0.7 \times V_{dd}$	-	$0.7 \times V_{dd}$	-	$0.7 \times V_{dd}$	V	
	Output Disable	-	$0.3 \times V_{dd}$	-	$0.3 \times V_{dd}$	-		$0.3 \times V_{dd}$
Duty Cycle	45	55	45	55	45	55	%	
Standby Current	-	400	-	400	-	400	uA	@PD Mode
	-	20	-	20	-	20	mA	@OE Mode
Output Loading	15		15		15		pF	
RMS Phase Jitter offset 12kHz to 20MHz @50MHz	Integer Mode	-	1.5	-	1.5	-	1.5	pSec
	Fractional Mode	-	2.0	-	2.0	-	2.0	
Startup Time	-	8	-	8	-	8	mSec	
Aging	-	$\pm 3$	-	$\pm 3$	-	$\pm 3$	ppm	@ $25^{\circ}\text{C}$ , First Year
Storage Temp. Range	-55	125	-55	125	-55	125	$^{\circ}\text{C}$	
FREQ. STABILITY vs. TEMP. RANGE		$\pm 15\text{ppm}$		$\pm 20\text{ppm}$		$\pm 25\text{ppm}$		$\pm 50\text{ppm}$
	-10~+60	Conditional		Available		Available		Available
	-20~+70	Not Available		Conditional		Available		Available
	-40~+85	Not Available		Conditional		Available		Available
	-40~+125	Not Available		Not Available		Not Available		Available

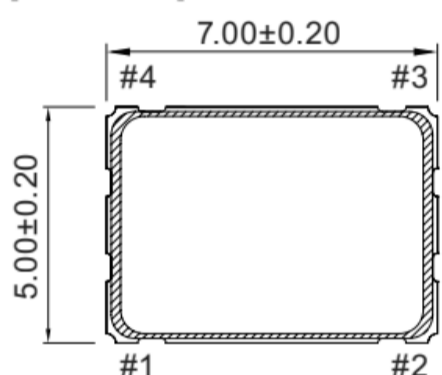
Note: not all combination of options are available. Other specifications may be available upon request.

Reliability	
Parameter	Condition
Test	IEC60068, GJB360B
Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solderability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC

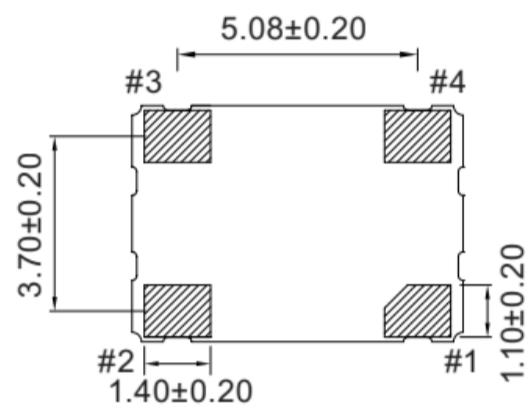
**Outline Dimension & Pin Connections**

Unit: mm

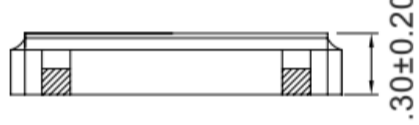
[ TOP VIEW ]



[ BOTTOM VIEW ]



[ SIDE VIEW ]



Pin#	Function
1	Tri-State
2	GND
3	Output
4	VDD

**Ordering Guide**

**BS0507A X X X XXX X XXX.XX X**

Product: SPXO

Outline: 7.0mm x 5.0mm Package A

Output: H: CMOS

Supply Voltage:  
0: 1.8 Vdc  
2: 2.5 Vdc  
3: 3.3 Vdc

Temp. Range:  
C: -20°C ~ +70°C  
I: -40°C ~ +85°C  
F: Customized

Tri-State Mode : Input to Pin 1

Frequency: xx MHz , xx KHz

Tuning Range: N:No Tuning

Phase Noise: X: Default

Temp. Stability:  
255: ±25ppm  
505: ±50ppm  
104: ±100ppm

Example: BS0507AD3I505CN20

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