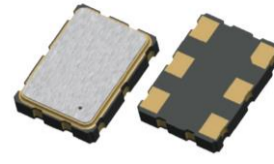


FEATURE		TYPICAL APPLICATION								
<ul style="list-style-type: none"> ● 2.5 x 2.0 SMD Oscillator ● Conforms to AEC-Q200 ● Tight symmetry (45 to 55%) available ● Operation voltage: 1.8V, 2.5V, 3.3V ● Tri-state enable/disable ● Built-in ASIC enables reduction of current consumption. 		<ul style="list-style-type: none"> ● Typically used for real time clock applications ● Mobile Phone ● DSC, Set-top Box, HDTV ● Car navigation systems 								
BS2520A Series										
Parameter		3.3v		2.5V		1.8V		Unit	Conditions	
		Min.	Max.	Min.	Max.	Min.	Max.			
Supply Voltage Variation		VDD-10%	VDD+10%	VDD-10%	VDD+10%	VDD-10%	VDD+10%	V		
Frequency		32.768						kHz		
Transition Time (10%-90%)	Rise Time / Fall Time	-	50	-	50	-	50	nSec		
		-	120	-	120	-	120	uA	(@ 15pF load)	
Supply Current		-	80	-	80	-	80	uA	@No Load	
Duty Cycle		45	55	45	55	45	55	%		
Output Level	Output High	2.97	-	2.25	-	1.62	-	V		
	Output Low	-	0.33	-	0.25	-	0.18	V		
Tri-State Mode (Input to Pin 1)	Enable	2.31	-	1.75	-	1.26	-	V		
	Disable	-	0.99	-	0.75	-	0.54	V		
Start Time		-	2	-	2	-	2	mSec		
Aging		-	±3	-	±3	-	±3	ppm	@ 25°C, First Year	
Storage Temp. Range		-55	125	-55	125	-55	125	°C		
FREQ. STABILITY vs. TEMP. RANGE		±20ppm		±25ppm		±40ppm		±40ppm		
		-10~+60	Available		Available		Available		Available	
		-20~+70	Conditional		Available		Available		Available	
		-40~+85	Not Available		Conditional		Available		Available	
		-40~+105	Not Available		Not Available		Available		Available	
		-40~+125	Not Available		Not Available		Conditional		Available	
Note: not all combination of options are available. Other specifications may be available upon request.										

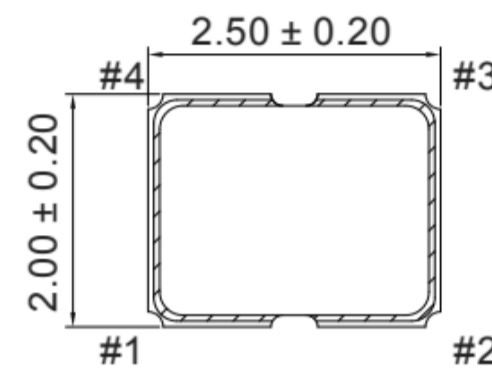
Reliability

Parameter	Condition
Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress 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

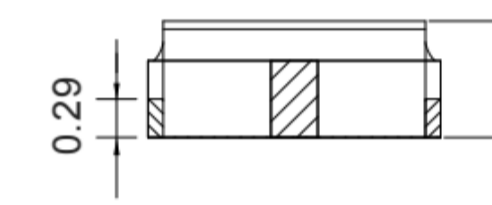
Outline Dimension & Pin Connections

Unit: mm

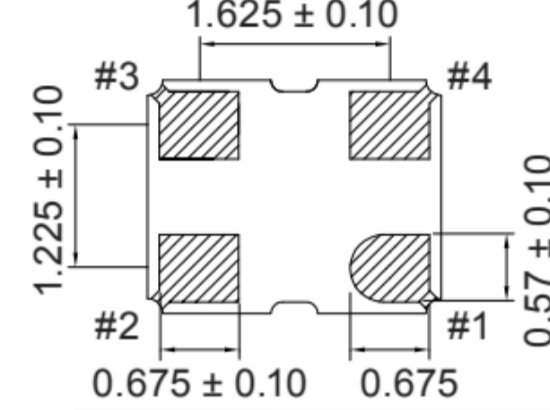
[TOP VIEW]



[SIDE VIEW]



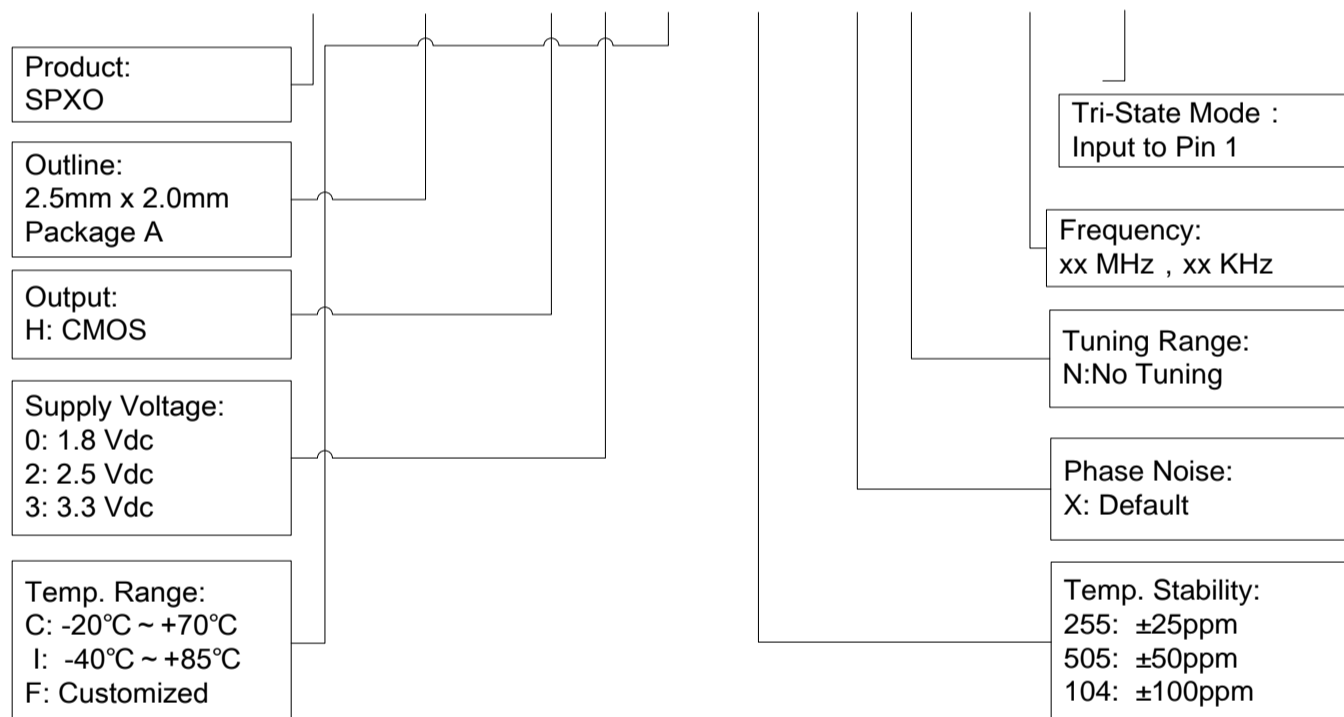
[BOTTOM VIEW]



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

Ordering Guide

BS2520A X X X XXX X XXX.XX X



Example: BS2520AD3I505CN20

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