

SURFACE-MOUNT CMOS PROGRAMMABLE OSCILLATOR



AP2S

2.5 x 2.0 x 0.9mm

AP2S



RoHS
Compliant

FEATURES:

- Performance comparable to fixed frequency oscillator
- Lowest peak-to-peak jitter
- Low supply current
- Short lead time
- Suitable for mass production
- Alternative to long lead-time XO's

For Small
Quantities,
Delivery Time
is 1-5 days

ELECTRICAL SPECIFICATIONS:

Characteristics	Unit	Minimum	Typical	Maximum
Frequency Range (3.3V)	MHz	3	--	110
(2.5V)	MHz	3	--	90
(1.8V)	MHz	3	--	75
Operating Temp. Range (See Options)	°C	-10	--	60
Freq. stability over operating temp.* (See Options)	ppm	-100	--	100
Input Voltage (Operating Vdd)	V	2.97	3.3	3.63
	V	2.25	2.5	2.75
	V	1.62	1.8	1.98
Input Current (3.3V)	mA			25
Input Current (2.5V)	mA			15
Input Current (1.8V)	mA			10
Output Type	CMOS			
Output Load	pF	--	15	--
Output "0" level (3.3V)	V	--	--	0.33
	V	--	--	0.25
	V	--	--	0.18
Output "1" level (3.3V)	V	2.97	--	--
	V	2.25	--	--
	V	1.62	--	--
Symmetry	%	45	50	55
Standby Current	uA	--	--	10
Rise Time (10%->90% Vdd)	nSec	--	2.5	--
Fall Time (90%->10% Vdd)	nSec	--	2.5	--
Tri-state Function (Input to pin 1)	pin 1 : High or Open , pin 3 : Enable			
	pin 1 : Low , pin 3 : Disable			
Jitter peak-to-peak**	psec	--	30 to 70	--

* Inclusive of calibration @25°C, operating temperature range, input voltage variation, load variation, aging, shock, and vibration.

** Jitter performance depends on programming parameter and output frequency. Please contact ABRACON for additional info.

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

AP2S□-Frequency-□-□-□-□

Supply Voltage		Operating Temp.		Freq. Stability		PIN 1(OPTION)		Packaging	
Blank*	3.3 V	I	0°C to +50°C	J(**)	±20ppm	**Blank	OE	B	Bulk
1	2.5 V	D	-10°C to +60°C	R	±25ppm	**B	PDB	T	Tape and Reel
2	1.8 V	E	-20°C to +70°C	K	±30ppm	Ask for Tube Package			
*3.3V : Standard		F	-30°C to +70°C	H	±35ppm	(** *)Available for I, D, or E temp options only.			
		N	-30°C to +85°C	B	±40ppm	Contact ABRACON for EJ or LR options. (Availability limited)			
		L	-40°C to +85°C	C	±50ppm				

** OE: Tri-state the output buffer.

** PDB: Tri-state the output buffer and shut off the oscillator, <10µA when PDB enabled.

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 1.04.08**
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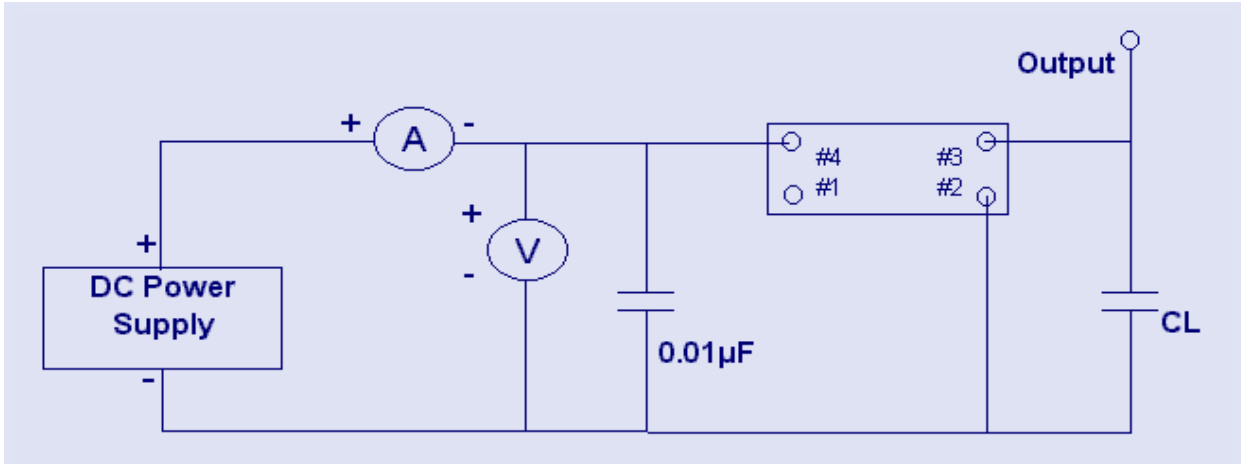
2.5 x 2.0 x 0.9mm

AP2S

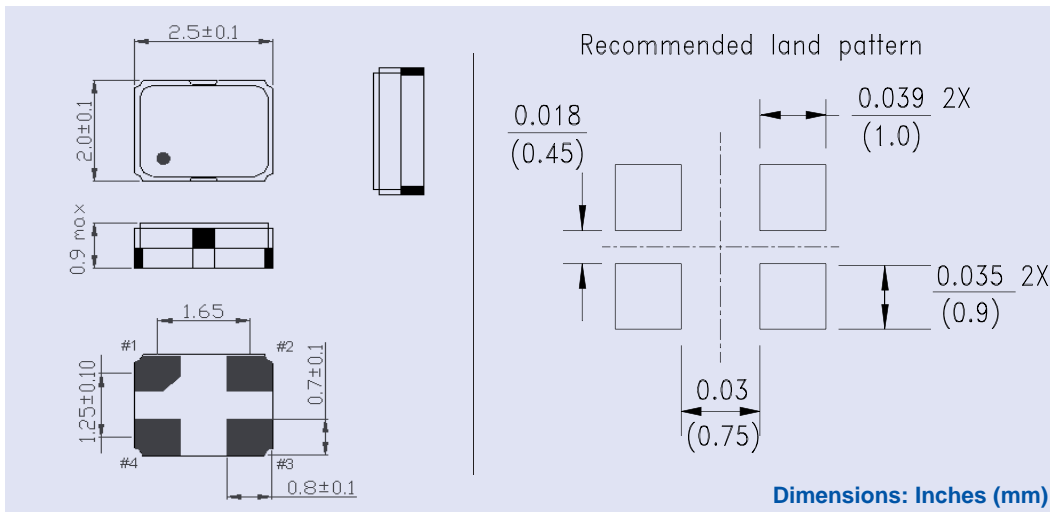


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TEST CIRCUIT:



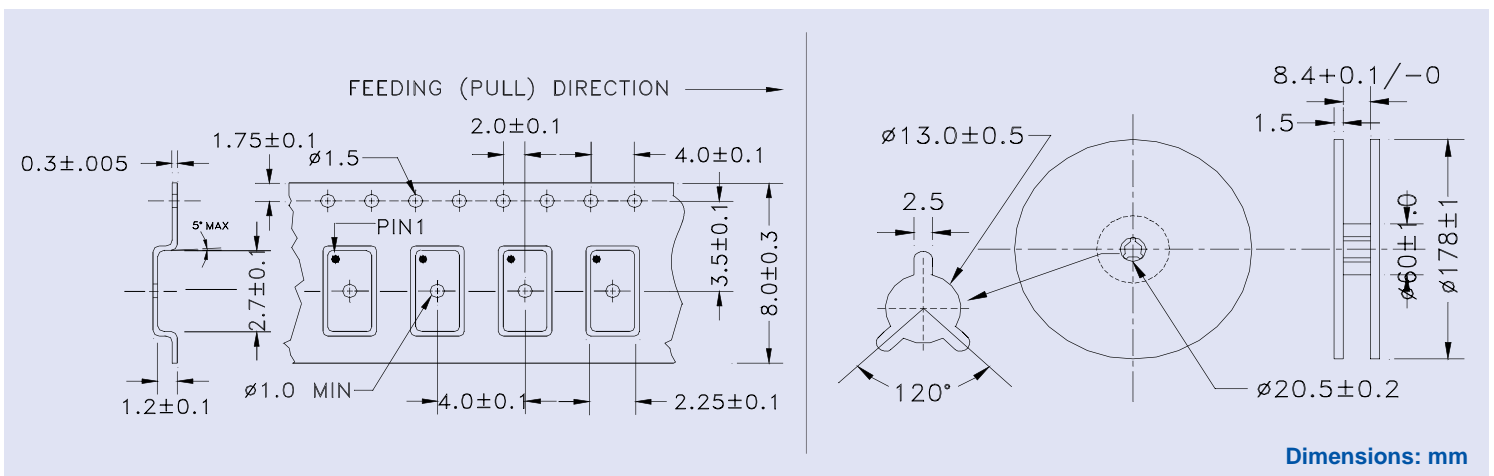
OUTLINE DRAWING:



PIN	CONNECTION
# 1	STAND-BY / OE
# 2	GND/CASE
# 3	OUTPUT
# 4	VDD

Note: It is recommended to use an approximately 0.01µF bypass capacitor between PIN 2 and 4.

TAPE & REEL: Tape and reel 1,000pcs/reel



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