

HCMOS/TTL COMPATIBLE SURFACE-MOUNT PROGRAMMABLE CRYSTAL CLOCK OSCILLATOR

AP5S

: PRELIMINARY

* PB FREE & ROHS COMPLIANT

Available Q3 2006



5.0 x 3.2 x 1.1mm

FEATURES:

- Performance equivalent to fixed frequency oscillator
- Lowest peak-to-peak jitter
- Low supply current
- Alternative to long lead-time XO's

STANDARD SPECIFICATIONS:

PARAMETERS	
Frequency Range	10 MHz to 200 MHz (3.3V)
	10 MHz to 166 MHz (2.5V)
	10 MHz to 133 MHz (1.8V)
Operating Temperature	0°C to + 70°C (see options)
Storage Temperature	- 55°C to +125°C
Overall Frequency Stability	± 50 ppm max. (see options)
Supply Voltage (Vdd)	1.8 to 3.3Vdc ± 10%
Input Current	6.5mA typ. (3.3V), 5.5mA typ. (2.5V & 1.8V)
Symmetry @ 1/2Vdd	45/55% max. (PLL Disabled); 47.5/52.5% max (PLL Enabled)
Rise and Fall Time (Tr/Tf)	2.5ns typ.; 3.5nS max (10%/90%, 15pF Load)
Output Voltage	VOH = Vdd-0.4V min.
	VOL = 0.4V max.
Start-up Time	10mS max
Tri-State Function	"1" (VIH = 2.0V min) or open: Oscillation
	"0" (VIL = 0.8V max) : Hi Z
Stand-by Current (option -B)	10 µA max.
Jitter Peak-to-Peak	70pS typ.
Phase Jitter RMS	2.5pS typ.
Output Type	CMOS * Can drive CMOS, HCMOS, and TTL inputs

PIN	FUNCTION
1	OE or Stand-By
2	Ground/Case
3	Output
4	VDD

MARKING without options:

- Line 1 : AP5xxx.xx (Frequency)
- Line 2: 042104 (Six digit lot & blank date code, Ex: AP180.00, AP45.00)

MARKING with options:

- Line 1 : AP5xxxRB, LB, LRB (xxx.xx: Frequency; R for Stability or L for Temp, & B for Stand-by)
- Line 2: 042104 (Six digit lot & blank date code, Ex: AP180.00, AP45.00)

OPTIONS AND PART IDENTIFICATION (Left blank if standard):

AP5S - Frequency - Temperature - Overall Frequency Stability - Standby - Drive Strength - Packaging

Temperature options:

L for -40°C to +85°C

Overall Frequency stability options:

R for ± 25 ppm max.

Drive Strength:

D for High Drive

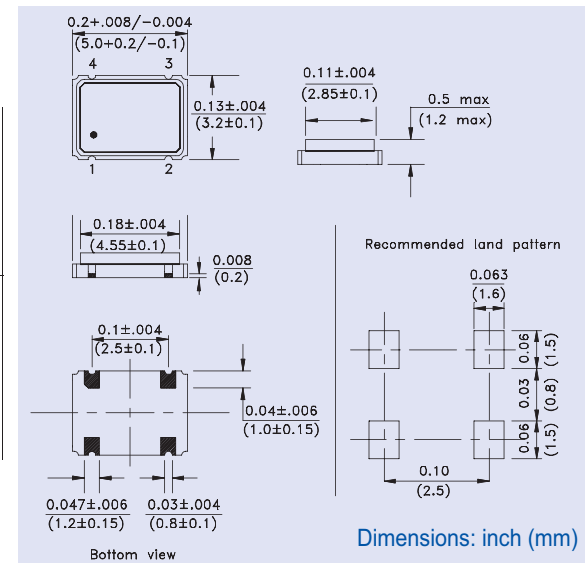
Packaging option:

T for Tape and Reel (1,000pcs/reel)

Drive Strength:

B for Sleep Mode

OUTLINE DRAWING:



ABRACON IS
ISO 9001 / QS 9000
CERTIFIED

rev1.1-10/05

