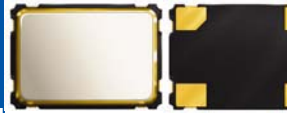


HCMOS/TTL COMPATIBLE SURFACE-MOUNT PROGRAMMABLE CRYSTAL CLOCK OSCILLATOR



7.0 x 5.0 x 1.6mm

AP7S



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:

3.3V, 2.5V OPERATION				
Characteristics	Unit	Minimum	Typical	Maximum
Frequency Range 3.3V	MHz	10	--	200
2.5V	MHz	10	--	166
Operation Temp. Range (See Options)	°C	0	--	+70
Storage Temp. Range (See Options)	°C	-55	--	125
Overall Frequency Stability * (See Options)	ppm	-100	--	100
Input Voltage (Operating Vdd)	V	2.97	3.3	3.63
	V	2.25	2.5	2.75
Input Current 3.3V	mA	--	--	20
	mA	--	--	30
Symmetry at 1/2 Vdd	%	45	50	55
Rise and fall time (Tr/Tf)**	nSec	--	2.5	3.5
Output Voltage				
	VOH	V	--	Vdd-0.4min
VOL	V	0.4V max	--	--
Start-up Time	msec	--	--	10
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	--	50	100
Phase Jitter (RMS, 12kHz to 20MHz)	pSec	--	2.5	--
Output Type	--	CMOS		

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

** Transition times are measured between 10% and 90% of Vdd with an output load of 15 pf.

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

AP7S□-Frequency-□-□-□

Supply Voltage		Operating Temp.		Freq. Stability		Packaging	
Blank*	3.3 V	I	0°C to +50°C	Y(*)	±10ppm	Blank	Bulk
1	2.5 V	D	-10°C to +60°C	J(**)	±20ppm	T	Tape and Reel
*3.3V : Standard		E	-20°C to +70°C	R	±25ppm		
		F	-30°C to +70°C	K	±30ppm		
		N	-30°C to +85°C	H	±35ppm		
		L	-40°C to +85°C	B	±40ppm		
				C	±50ppm		

* Available for 0°C to +50°C and -10°C to +60°C only.

** Contact ABRACON for -40°C to +85°C.

TEST CIRCUIT:

