

ECN/PCN No.: 3973
For Manufacturer

Product Description: CMOS Output Programmable SMD Crystal Clock Oscillator	Abraccon Part Number / Part Series: AP3S	<input type="checkbox"/> Documentation only	<input checked="" type="checkbox"/> Series
		<input checked="" type="checkbox"/> ECN	<input type="checkbox"/> Part Number
<input type="checkbox"/> EOL			
Affected Revision: O	New Revision: P	Application:	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety

Prior to Change: Option OE is available.

Section 1 Electrical Specs

Frequency Range:

V _{dd} = 3.3V	1		200	MHz	
V _{dd} = 2.5V	1		166		
V _{dd} = 1.8V	11		110		
V _{dd} = 1.8V	1		10.999		

Storage Temperature

-55		+150	°C
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Supply Voltage

V _{dd} = 3.3V	2.97	3.30	3.63	V	Standard
V _{dd} = 2.5V	2.25	2.50	2.75		V _{dd} option 1
V _{dd} = 1.8V	1.62	1.80	1.98		V _{dd} option 2

Input Current

V _{dd} = 3.3V			10	mA	1MHz ≤ F < 30MHz
			15		30MHz ≤ F < 75MHz
			20		75MHz ≤ F < 133MHz
			22		133MHz ≤ F < 166MHz
			25		166MHz ≤ F < 200MHz
V _{dd} = 2.5V			8		1MHz ≤ F < 30MHz
			10		30MHz ≤ F < 75MHz
			15		75MHz ≤ F < 133MHz
			15		133MHz ≤ F < 166MHz
V _{dd} = 1.8V			6		11MHz ≤ F < 30MHz
			8	30MHz ≤ F < 75MHz	
			12	75MHz ≤ F < 110MHz	

Rise/Fall Time

V _{dd} = 3.3V			3	ns	1MHz ≤ F < 10MHz
			2		10MHz ≤ F < 200MHz
V _{dd} = 2.5V			4		1MHz ≤ F < 10MHz
			3		10MHz ≤ F < 166MHz
V _{dd} = 1.8V			5		1MHz ≤ F < 10MHz
			4		10MHz ≤ F < 110MHz

Start-up Time

		2.0	ms
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Standby current

		15	uA	V _{dd} = 1.8, 2.5, 3.3V
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Period jitter peak to peak

		40	ps	Standard frequencies***
		200	ps	Other frequencies Reference only Please contact Abracon

After Change: Removal of OE option.

Section 1 Electrical Specs

Frequency Range:

V _{dd} = 3.3V	1		200	MHz
V _{dd} = 2.5V	1		200	
V _{dd} = 1.8V	1		125	

Storage Temperature

-55		+125	°C
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Supply Voltage

V _{dd} = 3.3V	3.135	3.30	3.465	V	Standard
V _{dd} = 2.5V	2.375	2.50	2.625		Vdd option 1
V _{dd} = 1.8V	1.71	1.80	1.89		Vdd option 2

Input Current

V _{dd} = 3.3V			35	mA
V _{dd} = 2.5V			30	
V _{dd} = 1.8V			20	

Rise/Fall Time

V _{dd} = 3.3V			2	ns
V _{dd} = 2.5V			3	
V _{dd} = 1.8V			4	

Start-up Time

		8	ms
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Standby current

		400	uA	V _{dd} = 1.8, 2.5, 3.3V
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Period jitter peak to peak

	1	2	ps	V _{dd} = 3.3V
	1.1	2	ps	V _{dd} = 2.5V
	1.5	2	ps	V _{dd} = 1.8V

Update Reflow Profile
Cause/Reason for Change:

Product discontinuation of the first generation internal IC used inside this product series. IC replaced with a new second generation device with improved performance (extended frequency range and improved jitter).

Change Plan

Effective Date: 9/04/2021	Additional Remarks:
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Change Declaration:

Issued Date: 9/04/2021	Issued By:	Issued Department:
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Approval:	Approval:	Approval:
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For Abracon EOL only

Last Time Buy (if applicable): None	Alternate Part Number / Part Series: None
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Additional Approval:	Additional Approval:	Additional Approval:
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Customer Approval (If Applicable)

Qualification Status:	<input type="checkbox"/> Approved <input type="checkbox"/> Not accepted
<i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>	

Customer Part Number:	Customer Project:
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Company Name:	Company Representative:	Representative Signature:
Customer Remarks:		