



**ASSO 7050**  
**ASSO 5032**

Features:  
Supply voltage 2,5V + 3,3V  
Different spread widths available  
Short delivery time

Specifications		
	ASSO 7050 / ASSO 5032	Remarks
Frequency range	6,0MHz ~ 200MHz	Please specify
Frequency stability	±50ppm ~ ±100ppm	Please specify
Operating temperature	0°C ~ +70°C ~ -40°C ~ +85°C	Please specify
Storage temperature	-55°C ~ +125°C	
Programmable voltage 6 ~ 166 MHz	2.5V ±10%	
Programmable voltage 6 ~ 200 MHz	3.3V ±10%	
Aging (ppm / Year), Ta = 25C, Vdd = 5 / 3.3 V	±5ppm	
Programmable output level	HCMOS	

### ASSO 5032

RECOMMENDED SOLDERING PATTERN

PIN CONNECTION

P/N	
1	Control
2	GND
3	Output
4	VDD

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Dimensions in mm

Operating conditions			
Description	Min	Max	Unit
Vdd Supply voltage	2.25	3.6	V
Vdd Rise Time	100		µS
HCMOS max capacitive load on outputs for CMOS levels		30	pF
Frequency: <40MHz		15	pF
Frequency: <40-200MHz			

Order key									
O	- 10.000000M	- ASSO 7050	- 50	- 2.5	- A	/ T	/ C	/ TR	
Part	Frequency	Type/Package	Tolerance	Voltage	Temperature	Option	Spread	Packaging	
O=Oscillator	M=MHz	ASSO= spread spectrum QO	±ppm	2.5=2.5Volt	A= 0°C ~ +70°C	T= Tristate	please see table 1	blank = tube	
		7050=SMD 7x5		3.3=3.3Volt	B= -10°C ~ +60°C			TR=Tape	
		5032=SMD 5x3,2			C= -10°C ~ +70°C			and reeled	
					D= -20°C ~ +70°C				
					E= -40°C ~ +85°C				

Output clock switching characteristics					
Description	Test conditions	Min	Typ	Max	Unit
Duty cycle HCMOS @ Vdd/2	2.25V~3.6V Vdd	45		55	%
Output clock rise / fall	0.2-0.8Vdd, 2.25-3.6 Vdd, CI=30			4.0	ns
	0.2-0.8Vdd, 2.25-3.6Vdd, CI=15			2.4	ns
Start up time	From power on		3	10	ms

Electrical characteristics					
Discription	Test conditions	Min	Typ	Max	Unit
Input characteristics (Pin 1) VIL, Low-level input voltage TO Tri-state or power-down	3.0 ~ 3.6 V Vdd			0.2 Vdd	V
VIH, High-level input voltage TO Enable output or no connect	3.0 ~ 3.6 V Vdd	0.7 Vdd			V
IIL, Input low current	VIN = 0V			80	µA
IiH, Input high current	VIN = Vdd			10	µA
Output characteristics VOL, Low-level output voltage	3.0 V ~ 3.6 V Vdd, 8 mA IoL			0.4	V
VOHCMOS, High-level CMOS voltage	2.25 V ~ 3.6 V Vdd, -8 mA IoL	Vdd - 0.4			V
Power supply current (unloaded)	2.25 ~ 3.6 Vdd, OUTPUT FREQ 200 MHz			35	mA
Input pull-up resistor	2.25 ~ 3.6V Vdd, VIN = 0.7V	50	70	90	Ω
Tri-state leakage current	3.6V Vdd		20		µA
Output enable mode	Output is tri-stated Output is power down				

Center Spread	Order key	Down Spread	Order key
%		%	
±0,25	B	-0,5	A
±0,50	D	-1,0	C
±0,75	F	-1,5	E
±1,0	H	-2,0	G
±1,5	M	-3,0	N
±2,0	T	-4,0	K

Table 1