Oscillator SMD, spread spectrum, programmable

RoHS 2002/95/EC

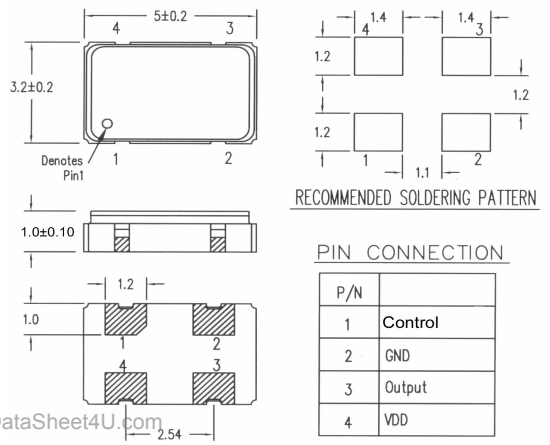
APSSO 7050
APSSO 5032

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

Specifications		
	APSO 7050 / APSO 5032	*Remarks*
Frequency range	1.5MHz ~ 200MHz	Please specify
Frequency stability	±25ppm ~ ±100ppm	Please specify
Operating temperature	-40°C ~ +85°C	Please specify
Storage temperature	-55°C ~ +125°C	
Programmable voltage 1 ~ 166 MHz	2.5V ±10%	
Programmable voltage 1 ~ 200 MHz	3.3V ±10%	
Aging (ppm / Year), Ta = 25C, Vdd = 5 / 3.3 V	±5ppm	
Programmable output level	HCMOS	

Drawing

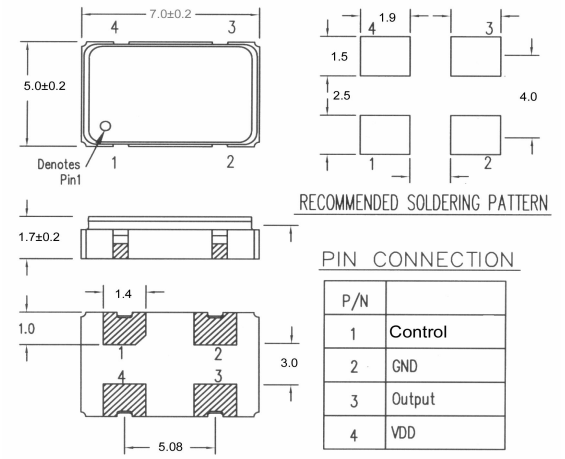
APSO 5032



PIN CONNECTION

P/N	
1	Control
2	GND
3	Output
4	VDD

APSO 7050



PIN CONNECTION

P/N	
1	Control
2	GND
3	Output
4	VDD

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			
	Frequency: <40MHz		30	pF
	Frequency: <40-200MHz		15	pF

Order key

O	**- 10.000000M**	**- APSO 7050**	**- 50**	**- 2.5**	**- A**	**/ T**	**/ C**	**/**
Part	**Frequency**	**Type/Package**	**Tolerance**	**Voltage**	**Temperature**	**Option**	**Spread**	**Packaging**
O=Oscillator	M=MHz	APQO= programmable QO 7050=SMD 7x5	±ppm	2.5=2.5Volt 3.3=3.3Volt	A= 0°C ~ +70°C B= -10°C ~ +60°C C= -10°C ~ +70°C D= -20°C ~ +70°C E= -40°C ~ +85°C	T= Tristate P= Power down	please see table 1	blank = tube

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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, Cl=30 0.2-0.8Vdd, 2.25-3.6Vdd, Cl=15			4.0 2.4	ns 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 IIH, Input high current	VIN = 0V VIN = Vdd			80 10	µA 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	ð þ
Tri-state leakage current	3.6V Vdd		20		µA
Output enable mode	Output is tri-stated Output is power down				

spread		spread	
A	± 0.125%	I	± 1.125%
B	± 0.250%	K	± 1.250%
C	± 0.375%	M	± 1.375%
D	± 0.500%	O	± 1.500%
E	± 0.625%	P	± 1.625%
F	± 0.750%	R	± 1.750%
G	± 0.875%	S	± 1.875%
H	± 1.000%	T	± 2.000%

Table 1