

HCMOS COMPATIBLE SURFACE MOUNT LOW PROFILE (1.4max) CRYSTAL CLOCK OSCILLATOR

ASV2 SERIES



RoHS
Compliant



7.0 x 5.0 x 1.4mm

FEATURES:

- Low height 1.4 mm max.
- HCMOS compatible, 1.8V to 3.3V_{DC}
- Tristate function
- Suitable for RoHS reflow
- Available for -40°C to 85°C extended temperature
- Seam sealed package assures high reliability
- Low stand-by current

APPLICATIONS:

- Clock signaling for μ Processors, PC Motherboards and Graphic Cards
- Wireless communications

STANDARD SPECIFICATIONS:

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range	1.8V	0.012	-----	124.999	MHz	
	2.5V	0.012	-----	133		
	3.3V	0.012	-----	133		
Operating Temperature		-10	-----	+70	°C	See options
Storage Temperature		-55	-----	+125	°C	
Overall Frequency Stability		-100	-----	+100	ppm	See options
Supply Voltage (Vdd)		2.97	3.3	3.63	V	See options
Input Current	Frequency	3.3V	2.5V	1.8V	mA (max)	
	0.012MHz Fo < 0.048MHz	5	5	N/A		
	0.048MHz Fo < 1.5MHz	5	5	5		
	1.5MHz Fo < 20MHz	7	7	5		
	20MHz Fo < 50MHz	20	15	15		
	50MHz Fo < 70MHz	30	20	15		
	70MHz Fo < 125MHz	30	20	20		
	125MHz Fo 133MHz	40	30	N/A		
Symmetry (@ 1/2Vdd)		40	50	60	%	See options
Rise and Fall Time (Tr/Tf)**	Frequency	3.3V	2.5V	1.8V	ns (max)	Measured between 10% and 90% of Vdd with 15pF load
	0.012MHz Fo < 1.0MHz	200	200	N/A		
	1.0MHz Fo < 20MHz	10	10	10		
	20MHz Fo < 50MHz	6	6	6		
	50MHz Fo < 70MHz	3	3	3		
	70MHz Fo < 125MHz	3	3	3		
	125MHz Fo 133MHz	3	3	N/A		
Output Load				15	pF	CMOS (5TTL compatible)
Output Voltage	VOH	0.9*Vdd	-----	-----	V	
	VOL	-----	-----	0.1*Vdd	V	
Start-up Time		-----	-----	8.0	ms	
Tri-state function (Stand-by) :	Vdd	VIH	-----	VIL	V	"1" (VIH $\geq$ 0.7*Vdd) or Open: Oscillation "0" (VIH < 0.3*Vdd) : Hi Z
	1.8	1.26	-----	0.5		
	2.5	1.75	-----	0.5		
	3.3	2.0	-----	0.5		
Disable current		-----	-----	10	uA	
Absolute Period jitter (Reference only. Please contact Abracon for each frequencies.):		-----	-----	40.0	ps	
Aging		-5.0	-----	+5.0	ppm	@+25°C First year



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