



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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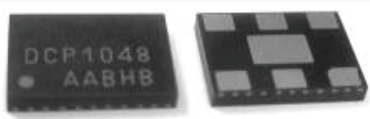


Abracon ASxxx Series of High Performance MEMS Differential Clock Oscillator

ASxxx Series of devices are miniature MEMS based, PLL clock oscillators optimized to meet the requirements of high speed serial data communication channels. These differential devices are available in single and dual output formats including CMOS, LV-PECL, LVDS, and HCSL.

Features

- Devices are available in standard pin-pin compatible [7.0 x 5.0mm], [5.0x3.2mm], [3.2x2.5mm], and [2.5x2.0mm] footprints.
- Devices are Lead Free & RoHS compliant.
- Jitter optimized for high speed serial data formats.
- High Reliability, with 20 times better MTTF than quartz oscillators
- Devices operate from +2.5, to +3.6 Volt supplies
- -40 to +85C operating temperature range, and extended Automotive Grade temperature stability at -55 to +125°C, ±25ppm
- Multiple output formats: CMOS, LVPECL, LVDS, HCSL, including Dual Output configurations.
- High Stability with ± 10ppm, ±25ppm, ±50 ppm available.
- Short lead Time: 2 weeks
- Shock & Vibration Immunity MIL-STD-883
- 50 dBc Power Supply Rejection Ratio
- Field programmable production devices are available



Applications

Storage Area Networks

» SATA, SAS, Fibre Channel, PCIe

Passive Optical Networks

» EPON, 10G-EPON, GPON, 10G-PON

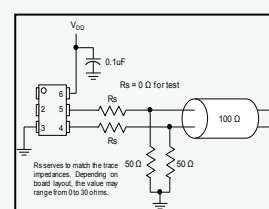
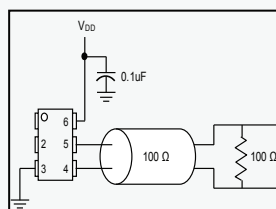
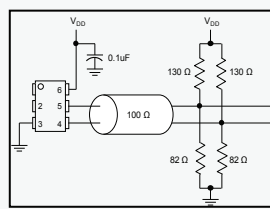
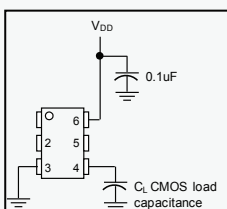
Ethernet

» 1G, 10GBASE-T/KR/LR/SR, FCoE

Video

» HD, SD, SDI

Application Output Configurations

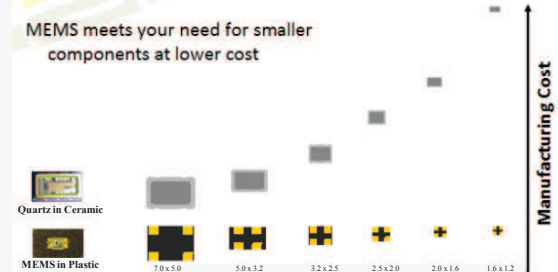


What the ASxxx can do for your design.....

The ASxxx series saves PCB area. Combine a small device footprint and minimal external components to get the smallest solution footprint.

The ASxxx series is optimized to exceed Jitter requirements of high speed serial data formats. Integrated jitter 100KHz -20MHz < 400fs, and 200KHz - 20 MHz < 300 fs.

ASxxx series is more cost efficient vs. quartz competitors. As device dimensions shrink, quartz resonator costs increase. The 0.2 mm² MEMS device cost decreases with package size.



Highly reliability designs such as Enterprise SSD Memory cannot meet their performance targets without highly reliable components such as the ASxxx clock oscillators.

<http://www.eetimes.com/design/memory-design/4412418/Why-flash-storage-needs-MEMS>

MEMS Part Number / Key Performance list

ABRACON DIFFERENTIAL MEMS					
Supply Voltage: 2.25V to 3.6 V					
Package Sizes: ASVMP (7.0 x 5.0 x 0.85mm, ASFLMP 5.0 x 3.2 x 0.85 mm, ASDMP 2.5 x 2.0 x 0.85mm & All others 3.2 x 2.5 x 0.85 mm)					
Part Number	Differential Output Type	Supply Current	Frequency Range	Integrated Phase Jitter (J _{PK})	Stability
ASEMCLP	LVPECL	56.5mA typ	~ 10 – 460MHz	Typically, < 400fs / (100KHz – 20MHz)	±10ppm over -40 / 85C
ASEMCLV	LVDS	29mA typ			
ASEMCHC	HCSL	40mA typ			
ASEMDHC	Dual HCSL	60mA typ			
ASEMDLP	Dual LVPECL	89mA typ			
ASEMDLV	Dual LVDS	89mA typ			
ASEMP	CMOS, LVPECL, LVDS, HCSL	31mA typ 51mA typ 29mA typ 40mA typ	CMOS ~ 10 – 170MHz	(Typical Ref 156MHz clock o/p)	±10ppm over -20/70C
ASDMP	CMOS, LVPECL, LVDS, HCSL	31mA typ 56.5mA typ 29mA typ 40mA typ	LVPECL / LVDS / HCSL ~ 10 – 460MHz		and
ASFLMP	CMOS, LVPECL, LVDS, HCSL	31mA typ 51mA typ 29mA typ 40mA typ	CMOS ~ 10 – 170MHz	Typically, < 550fs / (100KHz – 20MHz)	±50ppm over -55/+125C
ASVMP	CMOS, LVPECL, LVDS, HCSL	31mA typ 51mA typ 29mA typ 40mA typ	LVPECL / LVDS / HCSL ~ 10 – 425MHz	and < 350fs / (200KHz – 20MHz)	