

H

Thru-Hole

SMD

TTL / CMOS

1.0V

1.2V

1.8V

2.5V

3.3V

5.0V

Min.
20KHzMax.
160MHz

Applications

- CPU , Graphics , Multimedia A / V clocks
- MPEG / DVD / HDTV clocks
- Laser engine pixel / set - top clocks
- OC-3 , OC-12 , OC-48 and OC-192 clocks
- SONET / SDH / ATM clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PAL encoder / decoder clocks
- PLL / synthesizer clocks
- Fibre channel and ADSL clocks

General Specifications [TA = +25°C , V_{DD}= at specified voltage , Load : 15 pF]

Model		" H " series					
Input Voltage (V _{DD})		+ 1.0V D.C.±5%	+ 1.2V D.C.±5%	+ 1.8V D.C.±5%	+ 2.5V D.C.±5%	+ 3.3 V D.C.±5%	+ 5.0V D.C.±10%
		code is " 1 "	code is " 12 "	code is " 18 "	code is " 25 "	code is " 3 "	code is " 5 "
Frequency Range				1.8 MHz ~ 60 MHz	0.3 MHz ~ 125 MHz	20KHz ~ 130 MHz	20 KHz ~ 160 MHz
Output Wave Form		CMOS	CMOS	CMOS	CMOS	T T L / CMOS	T T L / CMOS
Output Logic High " 1 "	T T L					2.4 V (min.)	2.4 V (min.)
	CMOS	0.9 V (min.)	1.08 V (min.)	1.62 V (min.)	2.25 V (min.)	2.97 V (min.)	4.5 V (min.)
Output Logic Low " 0 "	T T L					0.4 V (max.)	0.4 V (max.)
	CMOS	0.1 V (max.)	0.12 V (max.)	0.18 V (max.)	0.25 V (max.)	0.33 V (max.)	0.5 V (max.)
Frequency Stability ⁽¹⁾ Codes		Frequency Stability over Operating Temperature Range		± 25 ppm	± 50 ppm	± 100 ppm	If non-standard , please enter the desired stability after the " C " or " I " For example : " C20 " ±20 ppm over -10°C to +70°C ; " I20 " ± 20 ppm over -40°C to +85°C
		Commercial (-10°C to +70°C)		A	B	C	
		Industrial (-40°C to +85°C)		D	E	F	
Output Load	T T L	2 ~ 10 (LS) T T L gates					
	CMOS	15 pF typical; 30 pF load for frequencies up to 70 MHz ; Contact Mercury for 50 pF load					
Rise Time (Tr)	T T L	10 n sec.(max.) ; 3 n sec.(typical) . Measured between 0.4V _{DC} ↔ 2.4V _{DC} (RL=390Ω ; CL = 15pF)					
Fall Time (Tf)	CMOS	10 n sec.(max.) ; 3 n sec.(typical) . Measured between 10% to 90% wave form (CL=15pF)					
Duty Cycle	T T L	40% (min.) , 60%(max.) Measured at +1.4V					
	CMOS	40% (min.) , 60%(max.) Measured at 50% of wave form [50% ± 5% is also available , add " S " at the end of the part number					
Start -Up Time (Ts)	10 m sec. (max.) ; 5 m sec. (typical)						
Current Consumption	10 ~ 45 mA (frequency dependent)						
Storage Temperature	- 50°C to 100°C						
Aging	±5 ppm per year (max.)						
Tri-State Option.	Output is high impedance when " 0 " is applied to pin 1 . Disable time is 150 n sec. max. Add " T " in part number for Tri-State option						

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