

Features

- World's thinnest, high accuracy programmable oscillator: 0.25mm (typical) height
- Cellphones, Portable AV Players, HDD, DSC/DVC, HC-SIM, Smart cards, Multi-chip Modules (MCM) Applications
- Supported Protocols: USB 2.0, PATA and Ethernet
- 1 MHz to 125 MHz factory programmable
- Standby or Output Enable low power modes
- Can be embedded inside IC package
- Outstanding mechanical robustness
- Ultra short lead time
- ROHs compliant and lead-free



Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Output Frequency Range	f	1	-	125	MHz	
Frequency Tolerance	F_tol	-100	-	+100	ppm	Initial tolerance, operating temperature, rated power supply voltage change, load change, aging, shock and vibration
		-500	-	+500	ppm	
Storage Temperature Range		-55	-	+125	°C	
Operating Temperature Range	T_use	-20	-	+70	°C	Extended Commercial
		-40	-	+85	°C	Industrial
Supply Voltage	Vdd	1.70	1.8	1.90	V	
Current Consumption	Idd	-	-	19	mA	15pf load, f = 65 MHz
Standby Current	I_std	-	-	50	µA	output is Weakly Pulled Down, \overline{ST} = GND
Symmetry	SYM	45	-	55	%	f = 1 MHz -65 MHz, 15pf load
		40	-	60	%	f = 65 MHz -125 MHz, 15pf load
Rise/Fall Time	Tr, Tf	-	1.0	2	ns	20% - 80% Vdd level
Output Voltage High	VOH	70	-	-	%Vdd	IOH = -10mA
Output Voltage Low	VOL	-	-	30	%Vdd	IOL = 10mA
Input Voltage High	VIH	70	-	-	%vdd	Pin 1, OE or \overline{ST}
Input Voltage Low	VIL	-	-	30	%vdd	Pin 1, OE or \overline{ST}
Output Load	L_cmos	-	-	15	pF	
Start up Time	T_osc	-	12	50	ms	Time @ minimum supply voltage to be zero
Peak-peak Period Jitter	T_pk	-	-	±185	ps	f = 24 MHz
		-	-	±100	ps	f = 100 MHz

Dimensions and Land Pattern

Dimensions (Unit: mm)

Note: XXXX top marking denotes manufacturing lot no.

Pin Map

Pin	Connection
1	OE/ \overline{ST}
2	GND
3	CLK
4	VDD

Pin #1 Functionality

OE
H or Open; specified frequency output
L: output is high impedance

\overline{ST}
H or Open; specified frequency output
L: output is low level (weak pull down)

Recommended Land Pattern (Unit: mm)

Note: A capacitor of value 0.01µF between Vdd and GND is recommended

Part No. Guide- How to Order

