

400 Reimann Ave., Sandwich, IL 60548 815-786-8411 FAX: 815-786-3600

CRYSTAL OSCILLATORS HCMOS - DRIVES 95Ω TRANSMISSION LINE, 1 MHz TO 105.561 MHz VERSATILE, GENERAL PURPOSE OSCILLATOR

CXO HG SERIES - HCMOS/TTL COMPATIBLE, CONSULT FACTORY FOR HIGHER FREQUENCIES

CXO HG-SERIES SPECIFICATION SUMMARY

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNITS
Supply Voltage	Vcc	Operating Absolute Maximum	4.5	5.0	5.5 7.0	V
Supply Current	Icc	1.0 -> 7.0 MHz >7.0 -> 25 MHz >25 -> 50 MHz >50 -> 70 MHz >70 -> 105.561 MHz		5 15 30 40 45	12 25 40 60 85	mA
Output Load		1.0 -> 50 MHz >50 -> 70 MHz >70 -> 105.561 MHz 1.0 -> 105.561 MHz**			50 30 15 10	pF TTL
Output Voltage	Voh Vol	CMOS Load TTL Load **	Vcc -.4 Vcc -.6		0.4	V
Output Current	Ioh Iol	Voh = 3.9V Vol = 0.4V			-16 16	mA
Symmetry		1.0 -> 50 MHz** >50 -> 70 MHz** >70 -> 105.561 MHz**	45 40 45		55 60 55	%
Rise & Fall Time	Tr/Tf	1.0 -> 25 MHz >25 - 70 MHz >70 -> 105.561 MHz		5 3 2	8 5 3	nS
Output Short-Circuit Current	Ios	1 min maximum duration			50	mA
Enable Input V	Vih Vil		2.0		0.8	V
Enable Input Load	Cin				10	pF
Tristate Leakage	Iz	Vil = 0.8V			0.05	mA

Unless otherwise specified all test conditions are under max rated TTL and/or CMOS load

** For TTL application above 25 MHz add "s" suffix to model designation

TRISTATE/ENABLE TRUTH TABLE

CONTROL INPUT	OUTPUT
OPEN or HIGH	OSC. OUTPUT
LOW	HIGH Z or LOGIC 1

TEST CONDITIONS

SEE FANOUT PG 3 FOR	CMOS	OR	TTL
Symmetry	50% of waveform		1.5V Level
Load	50 pF (unless noted)		10 TTL loads
Rise & Fall Time	10 to 90% of waveform		.5V to 2.4V

All parameters are met with MAXIMUM FANOUT LOAD UNLESS NOTED

ORDERING INFORMATION

Package Type/Option	Model	Frequency Tol	Code	Operating Temp. Range	Code
14 Pin DIP/STD Output	CXO-65HG	+/- .01% (100 ppm)	2	0°C to +70°C	C
14 Pin DIP/STD Output w/Enable	CXO-65HGE	+/- .005% (50 ppm)	3	-40°C to +85°C*	I
14 Pin DIP/Tristate Output	CXO-63HG	+/- .0025% (25 ppm)	5		
8 Pin DIP/STD Output	CXO-25HG	(0°C to 70°C only)			
8 Pin DIP/STD Output w/Enable	CXO-25HGE				
8 Pin DIP/Tristate Output	CXO-23HG				

S = Surface Mount, Figure E or G
Blank = Thru-hole, Figure D or F

OUTPUT FREQUENCY

* -20 to 85°C @ 70 MHz