



KXO-EH Series ECL Clock Oscillators

Drive-ECL 10KH Compatible - f_o : 50 to 135 MHz

FEATURES

- 1) ECL 10KH output
- 2) Hermetically Sealed Package
- 3) Resistant to Mechanical Shock
- 4) Crystal Technology
- 5) Complementary output or Enable/Disable function available

HOW TO ORDER

KXO-EH 1-P S C - 100.0000M

① ② ③ ④ ⑤ ⑥

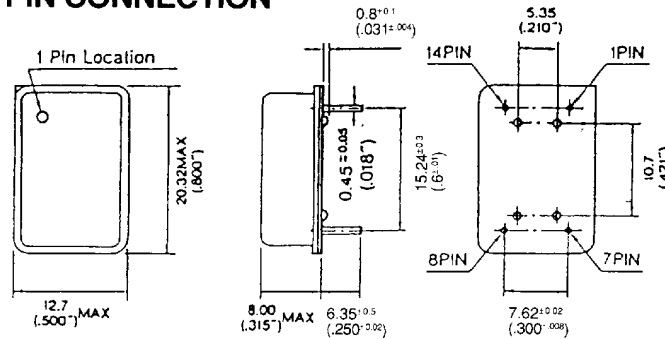
- ① Type (Kyocera Crystal Oscillator)
- ② Frequency precision: 1= ± 100 ppm; 0= ± 50 ppm
- ③ Power Supply voltage:
P = PLUS Specification (PIN 7 CASE GND)
Nil = MINUS Specification (PIN 14 CASE GND)
- ④ Duty Cycle:
S = 45% to 55 %
Nil = 40% to 60%
- ⑤ 1 PIN Function-
C = Complementary Output
L = E/D function, 8 PIN output Low Stop
H = E/D Function, 8 PIN output High Stop
- ⑥ Frequency

SPECIFICATIONS: (KXO-EH)

Classification		Code	Ratings		Unit	Remarks	
			Min.	Max.			
Output Frequency		f_{out}	50	135	MHz		
Frequency Precision		$\Delta f/f$	-100	+100	ppm		
Operating Temperature Range		T_{opr}	0	+70	°C		
Storage Temperature Range			-55	+125	°C		
Voltage		V_{EE}	-5.2±0.5%		VDC		
Electrical Current Consumption		I_{EE}	—	50	mA		
Output	Duty Cycle	S_y	40	60	%	at -1.3V DC level	
			45	55			
	“0” Level	V_{OL}	-1.95	-1.63	V	at 25°C	
			-1.95	-1.60		at 0 to 70°C	
	“1” Level	V_{OH}	-0.98	-0.81	V	At 25°C	
			-1.02	-0.74		at 0 to 70°C	
	Rise and Fall Time		T_R, T_F	—	3.0	nsec	20%—80% V_{EE}
	Enable/Disable Functions Only						
Input Voltage-Low		V_{IL}	-1.95	-1.48	V		
Input Voltage-High		V_{IH}	-1.17	-0.84	V		
Input Current-Low		I_{IL}	—	500	μA		
Input Current-High		I_{IH}	—	0.5	μA		
Enable/Disable Time		t_D	—	20	nsec		

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DIMENSIONS AND PIN CONNECTION



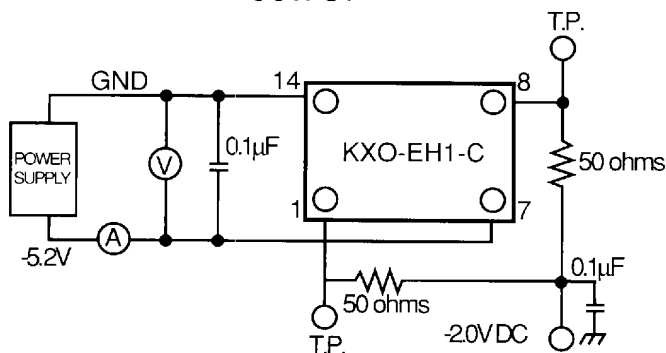
UNIT: mm (inch)

PIN NO	PLUS SPEC	MINUS SPEC
#1	E/D FUNCTION or COMPLEMENTARY OUTPUT	
#7	GND (CASE)	V_{EE}
#8	OUTPUT	OUTPUT
#14	V_{DD}	GND (CASE)

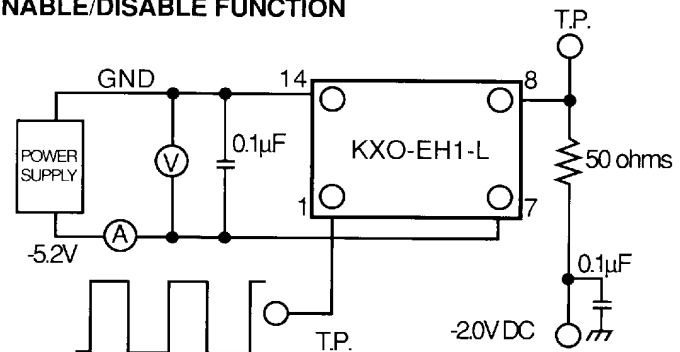
ENABLE/DISABLE FUNCTION

Option	#1 PIN	#8 PIN
"L" or "H"	"L" or Open	Oscillation
"L"	"H"	"L"
"H"	"H"	"H"

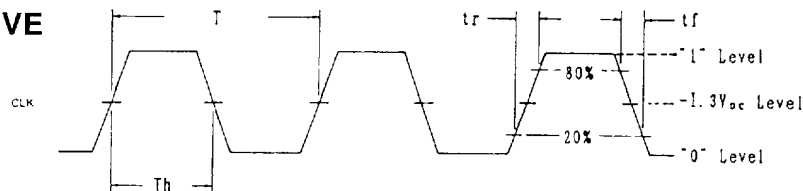
TEST CIRCUIT (KXO-EH) COMPLEMENTARY OUTPUT



ENABLE/DISABLE FUNCTION



SHAPE OF OUTPUT WAVE

SYM. = $T_h/T \times 100\%$

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Rated value	Unit
Power supply voltage	V_{EE}	-8.0 ~ 0	V
Input voltage	V_{IN}	0 ~ V_{EE}	V
Operating temperature	T_{opr}	0 ~ +70	°C
Storage temperature	T_{stg}	-55 ~ +125	°C

NOTE: If the device is used beyond absolute maximum ratings, it may cause permanent damage.

Device should always be used under the recommended operating conditions. Device reliability may be adversely affected if those conditions are exceeded.