



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 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

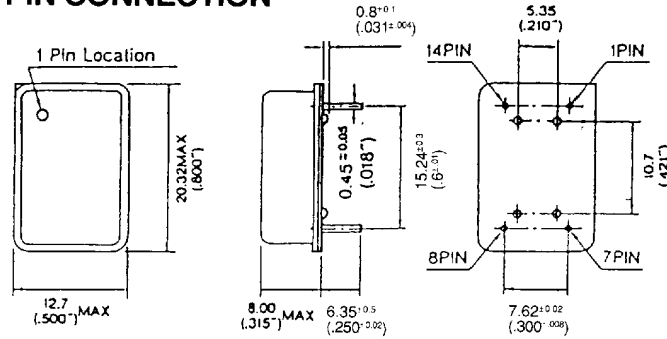
SPECIFICATIONS: (KXO-EH)

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 \pm 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	μ A		
Input Current-High	I_{IH}	—	0.5	μ A		
Enable/Disable Time	t_D	—	20	nsec		



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 DIMENSIONS AND PIN CONNECTION



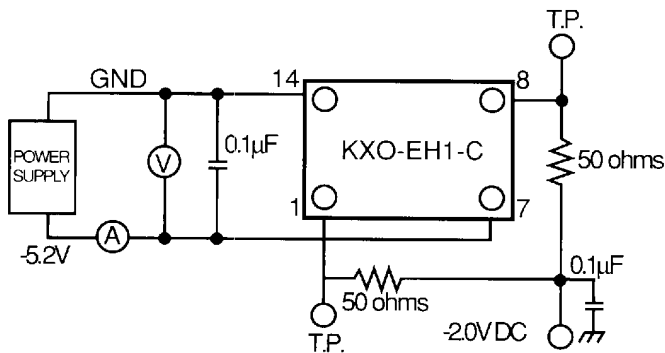
UNIT: mm (inch)

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)

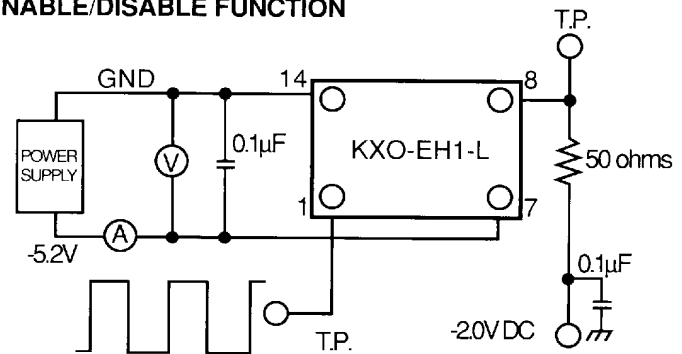
ENABLE/DISABLE FUNCTION

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

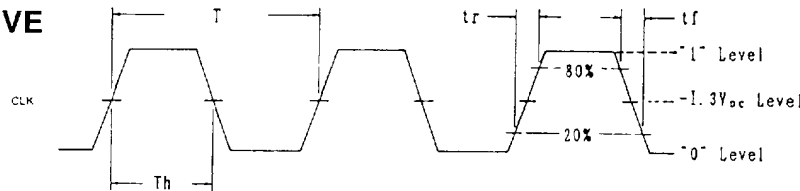
TEST CIRCUIT (KXO-EH) COMPLEMENTARY OUTPUT



ENABLE/DISABLE FUNCTION



SHAPE OF OUTPUT WAVE



SYM. = Th/T X 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.