

ECS-P83-B Datasheet



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DiGi Electronics Part Number	ECS-P83-B-DG
Manufacturer	ECS Inc.
Manufacturer Product Number	ECS-P83-B
Description	XTAL OSC PRG XO HCMOS 3.3V 50PPM
Detailed Description	XO (Standard) HCMOS 1 MHz ~ 125 MHz Programmable Oscillator 3.3V Enable/Disable 8-DIP, 4 Leads (Half Size, Metal Can)

This model ECS-P83-B is available at DiGi Electronics.

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Purchase and inquiry

Manufacturer Product Number:

ECS-P83-B

Series:

ECS-P83

Base Resonator:

Crystal

Programmable Type:

Programmed by Digi-Key (Enter your frequency in Web Order Notes)

Function:

Enable/Disable

Voltage - Supply:

3.3V

Frequency Stability (Total):

±50ppm

Spread Spectrum Bandwidth:

-

Ratings:

-

Package / Case:

8-DIP, 4 Leads (Half Size, Metal Can)

Height - Seated (Max):

0.213" (5.40mm)

Manufacturer:

ECS Inc.

Product Status:

Active

Type:

XO (Standard)

Available Frequency Range:

1 MHz ~ 125 MHz

Output:

HCMOS

Frequency Stability:

-

Operating Temperature:

0°C ~ 70°C

Current - Supply (Max):

28mA

Mounting Type:

Through Hole

Size / Dimension:

0.520" L x 0.520" W (13.20mm x 13.20mm)

Environmental & Export classification

RoHS Status:

RoHS non-compliant

REACH Status:

REACH Unaffected

HTSUS:

8542.39.0001

Moisture Sensitivity Level (MSL):

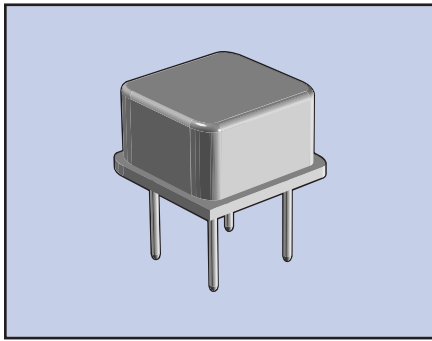
1 (Unlimited)

ECCN:

EAR99

ECS-P83/P85

PROGRAMMABLE CLOCK OSCILLATOR



The ECS-P83 (3.3V) and ECS-P85 (5V) 8 pin dip DIP is a twice programmable crystal controlled oscillator. The standard 8 pin DIP footprint is ideal for existing PC boards.

FEATURES

- Programmable (1 time)
- 3.3V & 5V options
- PLL technology
- 8 pin DIP footprint
- Extended temp range

PART NUMBERING GUIDE "EXAMPLE"

PART NUMBER	SERIES	FREQUENCY MHz)	STABILITY	EXTENDED TEMP (OPTION)
ECS	P83	- 16.312 -	A	- N

Sample Part Number: ECS-P83-16.312-AN

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-P83 (3.3V)			ECS-P85 (5V)			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
FREQUENCY RANGE		1.000		125.000	1.000		150.000	MHz
FREQUENCY STABILITY*	Option A			±100			±100	PPM
	Option B			±50			±50	PPM
OPERATING TEMPERATURE	Standard	0		+70	0		+70	°C
	Extended (Option N)	-40		+85	-40		+85	°C
STORAGE TEMPERATURE		-55		+125	-55		+125	°C
INPUT VOLTAGE (Vcc)		+2.97	+3.3	+3.63	+4.5	+5.0	+5.5	VDC
INPUT CURRENT				28			45	mA
OUTPUT SYMMETRY	at 1/2 Vcc LEVEL	40/60		60/40	40/60		60/40	%
RISE AND FALL TIMES	20% Vcc to 80% Vcc			4			4	ns
JITTER	1.0 ~ 33.0 MHz		±100	±250	±100		±250	pS
	> 33.1 MHz		±50	±100	±50		±100	pS
"0" LEVEL				0.4			0.4	VDC
"1" LEVEL		2.7			Vcc - 0.5			VDC
LOAD (HCMOS)	1.0 ~ 50.0 MHz			30			50	pF
	> 50.1 MHz			15			15	pF
ENABLE/DISABLE TIME				150			100	ns
START-UP TIME				10			10	ms

* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change aging, shock and vibration.

PACKAGE DIMENSIONS (mm)

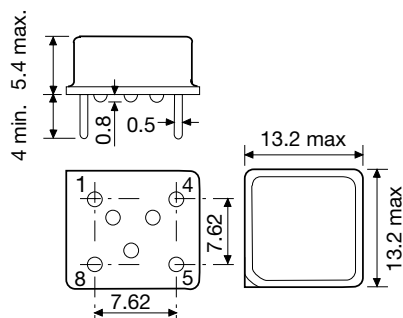


Figure 1) Side, Bottom and Top views

ECS-P83 (3.3V) TRI-STATE CONTROL VOLTAGE	
PIN #1 = OPEN	#3 = OUTPUT
PIN #1 = +0.7V MIN	#3 = OUTPUT
PIN #1 = +0.2V MAX	#3 = HIGH IMPEDANCE

ECS-P85 (5V) TRI-STATE CONTROL VOLTAGE	
PIN #1 = OPEN	#3 = OUTPUT
PIN #1 = +2.0V MIN	#3 = OUTPUT
PIN #1 = +0.8V MAX	#3 = HIGH IMPEDANCE

PIN CONNECTIONS	
#1	TRI-STATE
#4	GND
#5	OUTPUT
#8	VCC

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