

CFPP-149, -307 PROGRAMMABLE OSCILLATORS

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Description

- Programmable 14-pin DIL compatible resistance welded enclosure, hermetically sealed with glass to metal seal

Package Outline

- 14-pin DIL

Frequency Range

- 1 to 150MHz

Output Compatibility & Load

- Tri-state HCMOS/TTL (5.0V) (CFPP-149, -149I)

Maximum Capacitive Load for:	
TTL ≤ 40.0MHz	50pF
TTL > 40.0 to 150.0MHz	25pF
HCMOS ≤ 66.0MHz	50pF
HCMOS > 66.0 to 150.0MHz	25pF

- Tri-state HCMOS (3.3V) (CFPP-307, -307I)

Maximum Capacitive Load for:	
HCMOS ≤ 40.0MHz	30pF
HCMOS > 40.0 to 133.0MHz	15pF

Standard Frequency Stabilities

- ±25ppm, ±50ppm, ±100ppm (inclusive of supply voltage & output load variations over the operating temperature range)

Operating Temperature Range

- 0 to 70°C (CFPP-149, -307)
- 40 to 85°C (CFPP-149I, 307I)

Storage Temperature Range

- 55 to 125°C

Tri-state Operation

- Logic '1' to pin 1 enables oscillator output
- Logic '0' to pin 1 disables oscillator output. When disabled the oscillator output goes to the high impedance state
- No connection to pin 1 enables oscillator output

Supply Voltage

- 5.0V CFPP-149
- 3.3V CFPP-307

Marking Includes

- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability Code

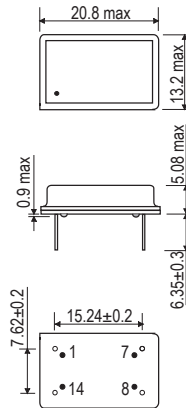
Packaging

- Bulk

Minimum Order Information Required

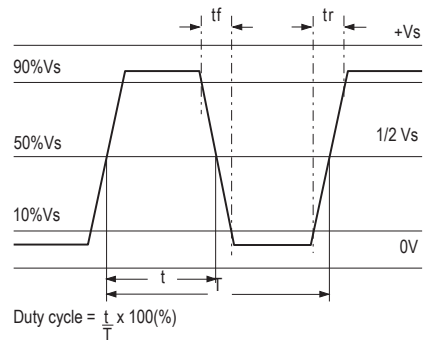
- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

Outline (mm)

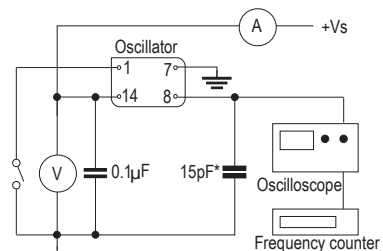


Pin Connections
 1. N/C or Enable/Disable
 7. GND
 8. Output
 14. +Vs

Output Waveform



Test Circuit



*Inclusive of jigging and equipment capacitance

Electrical Specifications - maximum limiting values

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr)	Fall Time (tf)	Duty Cycle	Model Number
1.0 to 40.0MHz	±25ppm, ±50ppm, ±100ppm	5.0V ±0.5V	45mA	4ns	4ns	45/55%	CFPP-149, -149I
		3.3V ±0.3V	25mA				CFPP-307, -307I
>40.0 to 66.0MHz		5.0V ±0.5V	45mA			40/60%	CFPP-149, -149I
		3.3V ±0.3V	25mA				CFPP-307, -307I
>66.0MHz to 100.0MHz		5.0V ±0.5V	45mA				CFPP-149, -149I
		3.3V ±0.3V	25mA				CFPP-307, -307I
100.0 to 133.0MHz		5.0V ±0.5V	45mA				CFPP-149, -149I
		3.3V ±0.3V					CFPP-307, -307I
>133.0 to 150.0MHz		5.0V ±0.5V	60mA				CFPP-149, -149I

Ordering Example
 Frequency _____ 20.0MHz CFPP-149 I C
 Model No. _____
 Operating Temperature Code: I = -40 to 85°C; not applicable for 0 to 70°C _____
 Frequency Stability: A = ±25ppm, B = ±50ppm, C = ±100ppm _____

Jitter pk-pk (typical)		Jitter pk-pk (max)	
1.0 to 33.0MHz	>33.0MHz	1.0 to 33.0MHz	>33.0MHz
100ps	75ps	250ps	175ps

PROGRAMMABLE
OSCILLATORS