

PIC-FC1 Frequency Counter

Introduction

This is a Frequency counter with PIC Microcontroller. It is available up to 38MHz at Normal HF mode. It is also available up to 2.4GHz with Fujitsu's MB-506 external prescaler.

Specifications

Display mode	Frequency, Wave length
Resolution	1Hz, 10Hz, 100Hz, 1kHz 1mm (Wave length. Mimimum measuring unit is 1KHz)
Unit	kHz (Resolution = 1Hz) or MHz (Others) X.XXXm (Wave length)
Supply current	7mA (Using Input A) 25mA (Using Input B)
Supply voltage	5.1 to 10V

Measurement mode (Maximum measurement frequency)/Gate time(*1) :Input A

	1Hz resolution	10Hz resolution	100Hz resolution	1kHz resolution
LF mode (2.3MHz)	1sec.	0.1sec.	0.01sec.	0.001sec.
MF mode (9.5MHz)	4sec.	0.4sec.	0.04sec.	0.004sec.
MH mode (19MHz)	8sec.(*2)	0.8sec.	0.08sec.	0.008sec.
HF mode (38MHz)	16sec.(*2)	1.6sec	0.16sec	0.016sec

Measurement mode (Maximum measurement frequency)/Gate time(*1) :Input B

	1Hz resolution	10Hz resolution	100Hz resolution	1kHz resolution
LF mode (150MHz)	64sec.(*2)	6.4sec.	0.64sec.	0.064sec.
MF mode (600MHz)	-	25.6sec.(*2)	2.56sec.	0.256sec.
MH mode (1200MHz)	-	51.2sec.(*2)	5.12sec.	0.512sec.
HF mode (2400MHz)	-	-	10.24sec.(*2)	1.024sec.

*1) Measuring time is added above plus 0.1sec.

*2) It is not displayed correctly if the value is greater than "16,777,215".