DDS FUNCTION GENERATOR
ATF05C

ATF05C	1µHz～5MHz

FEATURES

- Direct Digital Synthesis(DDS) technology, 2 independent output channels, LCD display
- 32 kinds of standard or build-in fixed waveforms
- Minimum stable output waveform: 1mV(50Ω)
- Multiple modulation functions: FM, FSK, ASK, PSK
- Frequency sweep, amplitude sweep and burst functions
- Over-voltage, over-current, output short-circuit and reverse voltage protections
- Optional configurations: Rs232 interface, Frequency Counter, Power Amplifier

SPECIFICATIONS

Output A Characteristics		
WAVEFORM	Waveform type	32 kinds, such as Sine, Square, Triangle, Pulse etc
	Waveform length	1024 points
	Sample rate	100 MSa/s
	Vertical resolution	8 bits
	Harmonic rejection (sine)	≥40dBc (< 1MHz), ≥35dBc (1MHz～20MHz)
	Total distortion(sine)	≤1% (20Hz ～ 200kHz)
	Rise/fall time of square	≤35ns
	Overshoot	≤10%
	Square duty cycle	1% ～ 99%
FREQUENCY	Frequency range	1µHz ～ 5MHz(Sine, Square)
		1µHz ～ 1MHz(other waveforms)
	Frequency Resolution	1µHz
	Frequency Accuracy	± (50ppm)
AMPLITUDE	Amplitude range	2mVpp ～ 20Vpp 1µHz ～ 5MHz (high impedance)
	Amplitude Resolution	20mVpp (amplitude＞about 2 Vpp)
		2mVpp (amplitude＜about 2Vpp)
	Amplitude Accuracy	± (1%＋2mVrms)(high impedance,1kHz,sine)
	Amplitude Stability	± 0.5%/ 3 hours
	Amplitude Flatness	±5% (<10MHz), ±10% (>10MHz)
	Output impedance	50Ω

SPECIFICATIONS

Output A Characteristics

OFFSET	Offset Range	± 10V (high impedance, attenuation 0dB)
	Offset Accuracy	±(1% + 20mVdc)
SWEEP	Sweep Type	Frequency or amplitude Sweep
	Sweep Mode	Linear or log sweep
	Sweep Range	Free to set the start and stop points
	Sweep Time	100ms～900s
	Sweep Direction	Up, down, up-down
	Control mode	Automatic or manual sweep
FM	Carrier singal	Channel A signal
	Modulating signal	internal signal of Channel B or external signal
	FM depth	0% ～ 20%
SHIFT KEYING	FSK	free to set the carrier and hop frequency
	ASK	free to set the carrier and hop amplitude
	PSK	0 ～ 360°, Max. resolution: 1°
	Alternate rate	10ms ～ 60s

Output B Characteristics

WAVEFORM	Waveform type	32 kinds, such as sine, square, triangle, pulse etc
	Waveform length	1024 points
	Sample rate	12.5 MSa / s
	Amplitude resolution	8 bits
	Square duty cycle	1% ～ 99%
FREQUENCY	Frequency range	1μHz ～ 1MHz(sine)
		1μHz ～100kHz (other waveforms)
	Frequency Resolution	1μHz
	Frequency Accuracy	± (10ppm)
AMPLITUDE	Amplitude range	50mVpp ～ 20Vpp (high impedance)
	Amplitude Resolution	20mVpp
	Output impedance	50Ω

TTL Output Characteristics

TTL	Waveform	rise/fall time ≤20ns (square)
	Frequency	10mHz ～ 1MHz
	Amplitude	TTL,CMOS compatible, low level ＜0.3V,high level ＞4V

GENERAL CHARACTERISTICS

Power Supply	AC110V/220V±10%, 50Hz/60Hz, 50VA Max.
Dimensions	415mm x 295mm x 195mm
Weight	3.5kg