

Function Generator Counter cum Power Supply SM5076 / SM5076-1 / SM5076-2



Advance Features

- 0.3Hz to 3MHz / 0.5Hz to 5MHz Function Generator with Sine, Square, Triangle, TTL & DC
- DC offset adjustment
- Square wave Rise time better than 40ns
- Microprocessor based design
- High signal purity and constant amplitude flatness throughout the entire range
- Internal and External Frequency Modulation
- 5 digit Auto ranging 15MHz Frequency Counter
- 50mVrms sensitivity for stable display for external signal frequency
- DC Power Supply 2 x 15V/ 1A, 5V/1A
- Digital display of voltage and current simultaneously in SM5076-1 & SM5076-2

Technical Specification	SM5076	SM5076-1	SM5076-2
Function Generator			
Operating Modes	Sine, Square, Triangle, DC, Free running, internal sweep or external frequency modulation, with or without DC offset,		
Frequency Range	0.3Hz to 3MHz		0.5Hz to 5MHz
Frequency Stability	< 0.5% / hr or 0.8% / 24 hr at constant ambient temperature		
Waveform Characteristics			
Sine wave Distortion	0.3Hz – 100kHz : max. 0.5 %		0.5Hz – 100kHz : max. 0.5 %
	0.1MHz – 0.3MHz : max. 1.5%		0.1MHz – 0.5MHz : max. 1.5%
	0.3MHz – 3MHz : max. 3%		0.5MHz – 5MHz : max. 3%
Square Wave Rise time	typ. <40 ns		typ. <30 ns
Overshoot	< 5%		
Triangular non-linearity	<1% (up to 100kHz)		
Trigger Output	Square Wave synchronous to signal output, TTL > 4 Vpp		
Frequency Display Accuracy	Up to 3Hz : $\pm (1\% + 3 D)$		Up to 5Hz : $\pm (1\% + 3 D)$
	3Hz – 3MHz : $\pm (5 \times 10^{-5} + 1D)$		5Hz – 5MHz : $\pm (5 \times 10^{-5} + 1D)$
Output (short-circuit-proof)			
Output Voltage	10Vpp into 50 Ω , max. 20Vpp open circuit		
Attenuation	max. 60dB, 2 steps : 20dB \pm 0.2dB each		
Variable	0 to 20dB		
Amplitude Flatness (sine/triangle)	0.3Hz – 0.3MHz : max. 0.2 dB		
	0.3MHz – 3MHz : max. 0.5 dB		
Output Impedance	Switchable 50 Ω / 600 Ω		
DC Offset	Variable offset range : max. \pm 2.5V into 50 Ω , max. \pm 5V open circuit		

Technical Specification	SM5076	SM5076-1	SM5076-2
Frequency Modulation			
FM Input	VCF BNC connector on rear panel		
Frequency Change	1 : 100 approx.		
Input Impedance	50k Ω 25 pF		
Input Voltage	\pm 30V max.		
FM Internal (Sweep)			
Sweep Speed	20ms to 4s ;		
Sweep Range	approx. 1 : 100		
Frequency Counter			
Frequency Range	10Hz to 15MHz		
Accuracy	\pm (5 \times 10 ⁻⁵ +1D)		
Input Sensitivity	50mVrms to 100mVrms		
Max. Input Voltage	150Vrms		
Input Impedance	1M Ω 50 pF		
DC Power Supply			
Output voltage	2 \times 15V, 1A, Adjustable from 2 to 15V		
	+5V, 1A, Adjustable from 4.5 to 5.5V		
	All supplies isolated from ground		
Output current	1A each		
Regulation	\pm 1%		
Ripple and Noises	<10mVrms		
Display	-	3 digit Switchable , simultaneous display of voltage and current	
Display Accuracy	-	+ (1% + 1d)	
General Information			
Supply	230V \pm 10% 50Hz, 100 – 240V		
Operating Condition	0 to 50°C, RH 95%		
Dimension	W : 285, D : 365, H : 75 (mm)		
Weight	4.5kg (approx.)		
Standard Accessories	Manual, BNC-BNC Cable, Power Cord.		
Optional Accessories	50 Ω Termination SA51, BNC- Banana Cable , BNC Test lead cable, Test Prods		

Subject to Change

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