

SPECIFICATIONS BK4017B

REQUENCY CHARACTERISTICS:

Waveforms:	Sine, Square, Triangle, \pm Pulse, \pm Ramp
Frequency:	0.01 Hz to 10MHz
Available ranges:	5
Resolution:	5 digits
Variable Duty Cycle:	0:100:1 continuously variable, 3-digit resolution
Operating Modes:	External VCG, Internal Sweep and Frequency Counter
Frequency Stability:	output will change less than 0.09% over 15 minutes after 1-hour warm-up

OUTPUT CHARACTERISTICS:

Impedance:	$50\Omega \pm 10\%$
Output Level:	$0.01 \div 10V_{p-p}$ into 50Ω $0.02 \div 20V_{p-p}$ into open circuit
Available ranges:	2
Accuracy:	$\pm 50mV_{pp}$ into 50Ω
Resolution:	up to 4 digits
Attenuation:	$-20dB \pm 1dB$
DC Offset:	
Preset:	$\pm 0.1V$ typical
Variable:	$\pm 10V$ into open-circuit, $\pm 5V$ into 50Ω
Resolution:	4 digits

SINE WAVE:

Distortion:	$\leq 1\%$ typical at 1 kHz
Flatness:	$\pm 5\%$ (.45 dB)

SQUARE WAVE:

Symmetry:	0.1Hz to 100 kHz $\leq 2\%$
Rise Time:	$\leq 20ns$

TRIANGLE WAVE:

Linearity:	$\geq 98\%$ to 100kHz
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TTL OUTPUT :

Level (aprox):	0.8V to 2.4V
Rise or Fall Time:	$\leq 25ns$ (10% to 90%)
Duty Cycle:	50% typical

CMOS OUTPUT :

Max frequency:	10 MHz
Resolution:	3 digits
Level:	4V to 14V $\pm 0.5 V_{p-p}$, (5MHz max) Continuously Variable
Rise or Fall Time ,4V:	$\leq 120ns$ (10% to 90%)

VCG (Voltage Controlled Generator) INPUT:

Input Voltage:	0-10 $\pm 1V$ causes a 100:1 frequency change
Impedance:	$10K\Omega \pm 5\%$

SWEEP OPERATION:

Mode:	LIN/LOG
Width:	100:1, continuously variable, 3-digit resolution
Rate:	0.01 sec to 30 sec, continuously variable, 4 digits resolution
Sweep Output:	$0.1 \div 10V_{p-p}$ into 50Ω

FREQUENCY COUNTER:

Range:	5Hz to 100MHz
Accuracy:	Time base Accuracy ± 1 count
Time Base Accuracy:	$\pm 10PPM$ ($23^{\circ}C \pm 5^{\circ}C$)
Display:	9 digits
Aging:	$\pm 5ppm/year$
Input:	50mVpp to 10Vpp

INTERFACE:

RS-232 using a DB-9 female connector, fix baud rate set at 9600 BPS

POWER SOURCE:

110/220 VAC $\pm 10\%$, 50/60 Hz, internal jumper selectable