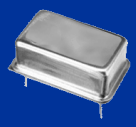
B1100 OSCILLATOR SERIES

DIL-14 PACKAGE; HCMOS/TTL OUTPUT



Features:

- 250 KHz to 800 MHz Frequency Range
- Industry Standard DIL-14 Thru Hole Package
- HCMOS/TTL Output Logic
- SMD Lead Forming (Gull Wing) Available
- Low Cost, Excellent for 16 and 32 Bit MPU's
- RoHS Compliant
- 24 – 72 Hour 1wk/2wk Facilitated Manufacturing Available*
- ± 10 –100ppm Frequency Stability Options Available
- Extended Temperature Range Options Available
- Very Low Phase Noise
- Tri-State Output Available On Pin #1
- Open Crystal or Encapsulated UM-1 Crystal Design

ELECTRICAL SPECIFICATIONS						
Supply Voltage (Vcc)		+5.0 Vdc ±5% ; +3.3Vdc ±5%				
Frequency Range		1.0 to 200.0 MHz				
Operating Temperature Range		0°C to 50°C / 0°C to 70°C / -20°C to +70°C / -40°C to +85°C				
Frequency Stability		±10ppm; ±15.0ppm; ±20ppm; ±25ppm; ±50ppm; ±100ppm				
Supply Current		20mA Maximum @ 20MHz				
Rise and Fall Time		10nS Maximum (3nS Typical)				
Enable Time (Tri-State Only)		100nS Maximum				
Start Up Time		10ms Maximum (5mS Typical)				
Output Load		HCMOS 15pF / 10TTL				
Symmetry		60/40% / 55/45% / 52.5/47.5%				
Storage Temperature		-55°C to 125°C				
Frequency Stability Vs.	Supply Voltage	±1.0ppm (V_{CC} ±5% change)				
	Load Changes	±1.0ppm (Load ±5% change)				
	Aging	±1.0ppm				
SSB PHASE NOISE	Offset	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz
	@ 10.0 MHz	-95 dBc/Hz	-125 dBc/Hz	-145 dBc/Hz	-155 dBc/Hz	-155 dBc/Hz
	@ 40.0 MHz	-80 dBc /Hz	-115 dBc /Hz	-140 dBc /Hz	-150 dBc /Hz	-155 dBc /Hz
	@ 120.0 MHz	-75 dBc/Hz	-110 dBc/Hz	-135 dBc/Hz	-120 dBc/Hz	-115 dBc/Hz

AVAILABLE FREQUENCY STABILITY OVER OPERATING TEMPERATURE RANGE TABLE							
Frequency Stability		±10ppm	±15ppm	±20ppm	±25ppm	±50ppm	±100ppm
Temperature Range	0°C to 50°C	Available	Available	Available	Available	Available	Available
	0°C to 70°C	UM-1 only*	UM-1 only*	Available	Available	Available	Available
	-20°C to 70°C	Contact Us**	Contact Us**	Contact Us**	Available	Available	Available
	-40°C to 85°C	Contact Us**	Contact Us**	Contact Us**	Contact Us**	Available	Available

*Only Available in 7.5mm Height with UM-1 Crystal design ;

** Contact us at 800-229-8033 / 631-242-8033 or email quality@brookdale.com to discuss your options.

PART NUMBER TABLE							
Model	Stability	Logic	Symmetry	Tri-State	Operating Temp. (°C)	Voltage	Package Height "H"
B11	10 = ±10ppm	T = TTL	Blank = 60 / 40%	Blank = N/C PIN # 1	Blank = 0°C to 70°C	Blank=+5.0V	Blank = 5.08 mm
	15 = ±15ppm	C = HCMOS	S = 55 / 45%	E = Enable PIN # 1	B = 0°C to 50°C	3 = +3.3V	2 = 6.8 mm w/ UM1 Crystal
	20 = ±20ppm	CT = HCMOS/TTL	ST = 52.5 / 47.5%		D = -20°C to 70°C		
	25 = ±25ppm				M = -40°C to 85°C		
	50 = ±50ppm						
	00 = ±100ppm						

Followed By The Frequency In MHz

For GULL WING Option Add Suffix "G" After the Part Number

PART NUMBER EXAMPLE

B1100CTSEM32-12.000MHz =

B11 Series with ±100ppm Frequency Stability, HCMOS/TTL Logic, 55/45% Symmetry, Tri-State Function On Pin 1, -40°C to 85°C Operating Temperature Range, With a +3.3V Supply Voltage and UM1 Crystal Design with a 6.8mm Package height At 12.000MHz

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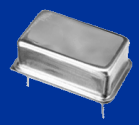
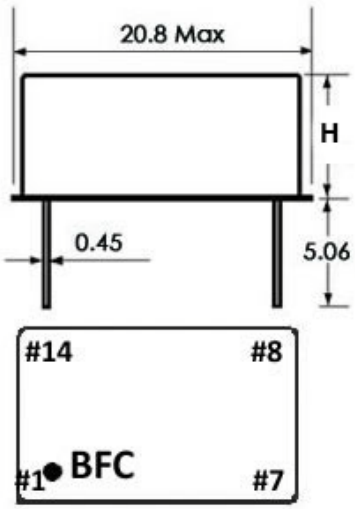
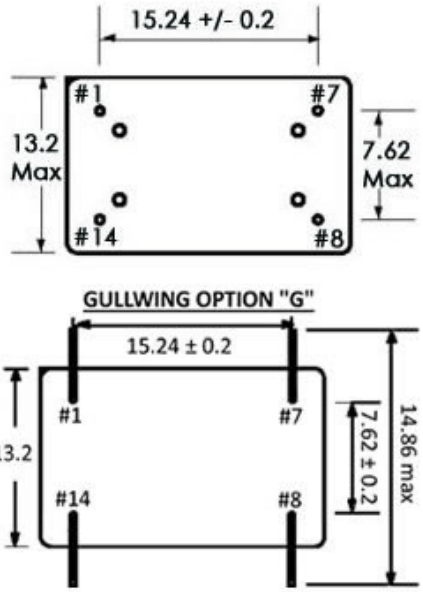




H=Package Height
Blank = 5.08mm Max.
2 = 6.80mm Max.

PIN CONNECTION	PIN #
N/C or E/D	#1
GROUND	#7
OUTPUT	#8
SUPPLY VOLTAGE	#14



CRYSTAL DESIGN /FREQUENCY RANGE TABLE

APPLICATIONS

SONET / SDH / DWDM

Ethernet, Gigabit Ethernet

Storage Area Networks

Digital Video

Broadband Access