



Applications:

- Phase Locked Loops
- Clock Recovery Circuits
- Optical Transmission Equipment
- Digital Cross Connect Equipment
- Clock Filtering Circuitry

Features:

- Tape and Reel Packaging
- 40/60% Symmetry
- -40°C-85°C Operating Temperature
- LVPECL Compatible
- Standard Complementary Outputs

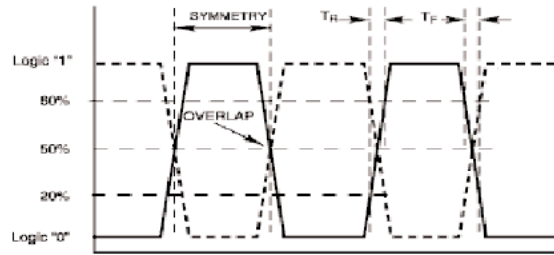
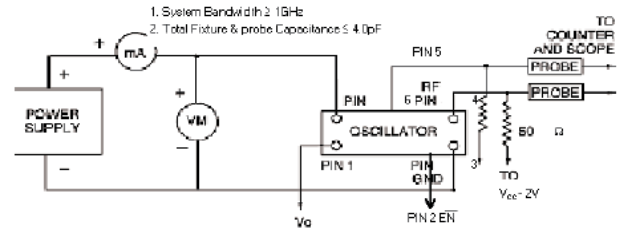
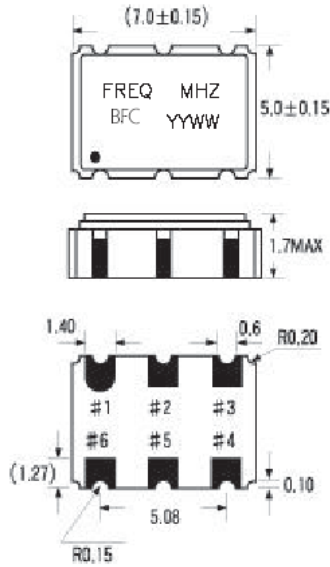
Electrical Specifications

Model	BF1157A
Frequency Range (MHz)	19.440 to 160.000
Input Current (mA)	< 100
Frequency Stability (ppm)	
Overall	Inclusive of Calibration, Temperature, Voltage, Load and 10 Yrs. Aging
0°C to +70°C	
-40°C-85°C	±50
Temperature Range (°C)	
Operating	-40°C to +85°C
Storage	-55°C to +125°C
Supply Voltage (V)	+3.3V ±5%
Symmetry (%)	40/60 (See Below)
Jitter (fj > 1KHz)	1ps RMS
Tri-state Output On/Off(Pin 1)	2.8V/0.6V
Start Up Time (ms)	<10

PIN	Function
1	Tri-State
2	N/C
3	V _{SS} / Ground
4	Output
5	Output
6	+V _{CC}

Part Numbering Guide

BF1157AX - 155.52
 ↳ "Blank" Tape and Reel
 ↳ "B" = Bulk



Output Specification	LVPECL					
Parameter	Symbol	Units	Test Cond.	Min.	Typ.	Max.
Ground Reference	V_{SS}	Volts	Reference		0	
Power Supply	V_{CC}	Volts	Reference	3.135	3.3	3.465
"0" Level	V_{OL}	Volts	50 into V_{CC-2}	$V_{CC}-1.95$		$V_{CC}-1.55$
"1" Level	V_{OH}	Volts	50 into V_{CC-2}	$V_{CC}-1.1$		$V_{CC}-0.88$
Rise Time	T_R	ns	50 into, 20% to 80%		.6	2
Fall Time	T_F	ns	50 into, 80% to 20%		.6	2
Overlap	T_{OL}	ps	50%			
Symmetry	S	%	$V_{CC}-1.3$	40		60

Mechanical and Environmental Specifications

Test	Reference Documents	Test Description
Temperature Cycle	MIL-STD-883, Mtd 1010, Cond. B	-55°C to + 25°C; Air to Air; 100 cycles; 10 min. dwell
Mechanical Shock	MIL-STD-883, Mtd 2002, Cond. B	1500g's
Vibration	MIL-STD-883, Mtd 2007, Cond. B	20-2000 Hz; 0.06 inch; 15 g's; 3 planes
Humidity Steady State	MIL-STD-883, Mtd 103	40°C; 90%-95% R.H.; 56 days
Thermal Shock	MIL-STD-883, Mtd 1011.7, Cond. B	100°C to 0°C; Water-to-Water; 15 cycles
Electrostatic Discharge	MIL-STD-883, Mtd 3015, Class II	2 KV to 4 KV Threshold
Solderability	MIL-STD-883, Mtd 2022.2	Solder dip; Meniscograph Criteria
Hermeticity	MIL-STD-883, Mtd 1014.8, Cond. A1	Mass spectro. 2 X 10 ⁻⁸ atmos. CC/sec He
Resistance to Soldering	MIL-STD-202, Mtd 210D, Cond. J	235°C; 30 seconds
Lead Integrity	MIL-STD-883, Mtd 2004.5, Cond. A, B1	Lead tension and bend stress
Marking Permanence	MIL-STD-883, Mtd 2015.8	Resistance to solvents
Life Test	MIL-STD-883, Mtd 1005.6	125°C, powered, 1000 hours minimum

Brookdale Frequency Controls, Inc.
36-B Grant Ave. Bay Shore, NY 11706 USA
Phone: 1-866-280-7700 or 631-242-1402
Fax: 631-595-1845
E mail: sales@bfc-inc.com
www.bfc-inc.com