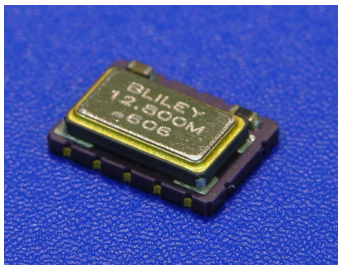
5x7 mm TCVCXO T85J Series

Description:

The T85J series TCXO is an analog compensated TCXO that offers proven phase noise performance with Frequency vs. Temperature stability starting at ±1.0 part per million. The miniature 5 x 7 mm ceramic SMD package is hermetically sealed for optimum reliability.



Features:

- **Available in frequencies from 5 to 52 MHz with 10 MHz, 12.8 MHz, 16.384MHz, 19.44MHz, 26MHz, 40MHz, and 50MHz all being standard.**
- **+/-5 ppm frequency pull range available**
- **CMOS and Clipped Sine Wave options can be specified**
- **RoHS-6 / Lead-free compliant**

Frequency Range, Operating Temperature, and Frequency Stability:

Frequency Range
5 to 50 MHz

Operating Temperature	Temp Range Code
0℃ to +55°C	A
-10℃ to +60°C	B
-20℃ to +70°C	C
-30℃ to +85°C	D
-40℃ to +85°C	E

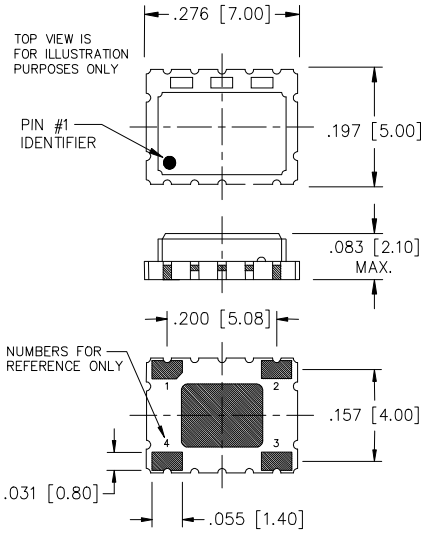
Frequency Stability	Frequency Stability Code
+/- 1.0 ppm	A
+/- 1.5 ppm	B
+/- 2.0ppm	C
+/- 2.5 ppm	D

- Frequency Tolerance ±2ppm @ 25°C (1) hour after reflow
- Frequency vs. Supply Voltage (±5% Change) ±0.1ppm max
- Frequency vs. Load Change (±10% Change) ±0.2ppm max

Aging: (typical at 10MHz after 30 days continuous operation)

Frequency	Timeframe	Aging
10 MHz	20 Years	+/- 2.5 ppm

Phase Noise: Frequency	dBc Offset	@10.0MHz Phase Noise (Typ.)
10.0 MHz	1 Hz	- 60 dBc/Hz
	10 Hz	- 85 dBc/Hz
	100 Hz	-115 dBc/Hz
	1 KHz	-135 dBc/Hz
	10 KHz	-148 dBc/Hz
	100 KHz	-150 dBc/Hz



PIN CONNECTIONS

1. TCVCXO: VOLTAGE CONTROL
   OR
   TCXO: GROUND
2. GROUND
3. OUTPUT
4. + VDC

Supply Voltage (Vs):

Power Supply (Vs)	+3.3 Vdc +/-5%	+2.5 Vdc +/-5%
Product Code	**C**	**D**

Current Consumption:

	CMOS	Clipped Sine Wave
Supply Current	6 mA	3.5 mA

Environmental:

Storage Temperature	-55 to +125° C

Output Waveform:

	CMOS	Clipped Sine Wave	
HCMOS Output Levels (15pf load)	"0" < 0.1(Vs); "1" > 0.9(Vs)	Output Level	0.8 V p-p min.
Rise / Fall Time	<10ns (10% to 90%)		
Duty Cycle	45 to 55% @ 50% Logic 1		
Product Code	**A**	**B**	

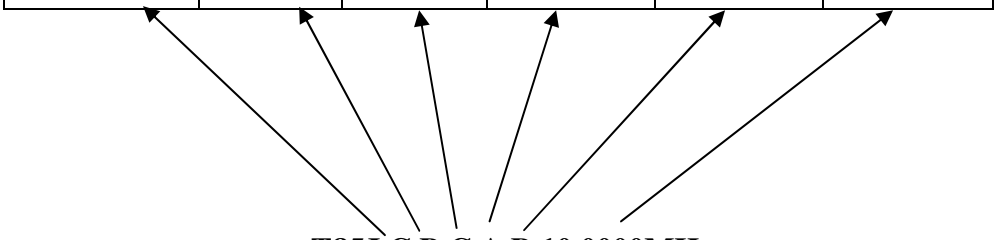
Pulling Range:

Tuning Range	None (TCXO)	+/- 5 min ppm
Product Code	**A**	**B**

*Note: Only +/- 5 ppm minimum pull is available as a TCVCXO

Ordering Options:

Operating Temperature	Frequency Stability	Supply Voltage	Output Waveform	Pulling Range	Operating Frequency (MHz)
A	A	C	A	A	xxMxxxx
B	B	D	B	B	
C	C				
D	D				
E					



T85J C B C A B 10.0000MHz

Example part number: T85JCBCAB10M0 (10MHz, Operating Temperature Range -20°C to +70°C, Frequency vs. Temperature stability ±1.5ppm, Supply Voltage 3.3VDC, Output Waveform CMOS, Electronic Frequency Control ±5ppm.