

## Helping Customers Innovate, Improve & Grow



## Features

- Ultra-High stability
- Excellent temperature stability
- SC-Cut crystal
- Previous Model: C4605
- Frequency Range: 5 MHZ to 20 MHZ

# **Applications**

- CDMA2000 and UMTS base stations
- Test and Measurement equipment

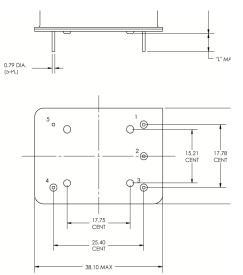
# **Performance Specifications**

Frequency Stabilities <sup>1</sup> (SC-Cut Crystal)						
Parameter	Min	Typical	Max	Units	Condition	
vs. operating temperature range (referenced to +25°C)	-0.4 -0.2 -0.4		+0.4 +0.2 +0.4	ppb ppb ppb	0 to +70°C 0 to +70°C -20 to +70°C	
Initial tolerance vs. supply voltage change vs. load change vs. aging / 1 day vs. aging / 1 day vs. aging / 1 year	-100 -0.2 -0.2 -0.5 -0.2 -25		+100 +0.2 +0.2 +0.5 +0.2 +25	ppb ppb ppb ppb ppb ppb	at time of shipment, nominal EFC $V_s \pm 5\%$ Load $\pm 5\%$ after 72 hours of operation after 7 days of operation after 7 days of operation	
Warm-up time			5	minutes	to ±10ppb of final frequency (1 hour reading) @ +25°C	
Supply Voltage (Vs)						
Supply voltage	11.4	12.0	12.6	VDC		
Supply voltage	4.75	5.0	5.25	VDC		
Power Consumption			9 3	Watts Watts	during warm-up steady state @ +25°C	

# **Performance Specifications**

RF Output						
Parameter	Min	Typical	Max	Units	Conc	lition
Signal [Option]	HCMOS					
Load			15 pF			
Signal Level (Vol)			0.5	VDC	15 pF Load,	12 V supply
Signal Level (Vol)			0.3	VDC	15 pF Load, 5V supply	
Signal Level (Voh)	2.8			VDC	15 pF Load,12 V supply	
Signal Level (Voh)	4.5			VDC	15 pF Load, 5V supply	
Duty Cycle	45		55	%	@ (Voh-Vol)/2	
Signal [Standard]	Sinewave					
Load		50		Ohms		
Output Power	+5.0	+7.0	+9.0	dBm	50 Ohi	n load
Harmonics			-30	dBc	50 Ohi	m load
		Freque	ncy Tuning	(EFC)		
Tuning Range	±0.25	±0.5	±0.75	ppm		
Linearity			20	%		
Tuning Slope		Pos	itive			
Control Voltage Range	0.0	2.5	5.0	VDC		
		Additi	onal Param	eters		
Phase Noise			-90 -120 -135 -140 -140	dBc/Hz dBc/Hz dBc/Hz dBc/Hz dBc/Hz	1 Hz 10 Hz 100 Hz 1 kHz 10 kHz	@ 10MHz
Weight			50	g		
		Absolute	Maximum	Ratings		
supply voltage (Vs)			15 7	V V	with 12V supply with 5V supply	
Output Load			50 25	pF Ohm	with HCMOS signal with Sinewave signal	
Operable Temperature Range	-55		+85	°C		
Storage Temperature Range	-55		+125	°C		

# **Outline Drawing / Enclosure**

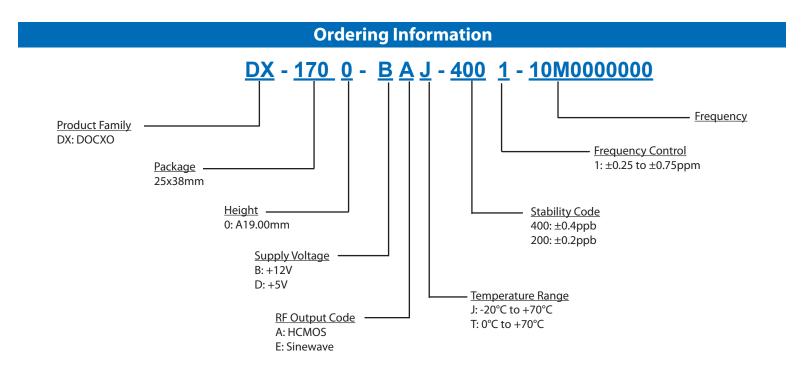


Dimensions in inches (mm)

Туре А					
Code	Height "H"	Pin Length "L"			
0	19.00	5.00			

Pin Connections				
1	Electronic Frequency Control Input (EFC)			
2	No Connect			
3	Supply Voltage Input (Vs)			
4	RF Output			
5	Ground (Case)			

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#### Notes:

- 1. Contact factory for improved stabilities or additional product options. Not all options and codes are available at all frequencies.
- 2. Unless other stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C).
- 3. Phase noise degrades with increasing output frequency.
- 4. Subject to technical modification.
- 5. Contact factory for availability.

## **For Additional Information, Please Contact**

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