

Typical Applications

*PCS Base Stations
Cellular Base Stations
Synthesizers
Test Equipment
Digital Switching*

Features

*Low Profile, Compact Package
High Stability
AT-Cut Crystal*



Frequency range

10 MHz – 30 MHz

Standard frequencies

10MHz

Frequency stabilities

Parameter	Code	Frequency stability	Operating temp range
vs. operating temperature range	B48	± 40 ppb	0....50°C
	B38	± 30 ppb	
	C58	± 50 ppb	0.....70°C
	C48	± 40 ppb	
	D27	± 200 ppb	-20....+70°C
	D17	± 100 ppb	
	E37	± 300 ppb	-40....+85°C
	E27	± 200 ppb	
Parameter	Value		Condition
vs. aging /daily ¹	< ± 2 ppb		after 72 hours of operation 20 MHz > 20 MHz
vs. aging /1 Year	< ± 0.5 ppm		
	< ± 0.75 ppm		

Frequency tuning

Parameter	Value	Condition
Electrical frequency control (EFC):	> ± 8 ppm	typical
Pulling slope	Positive	

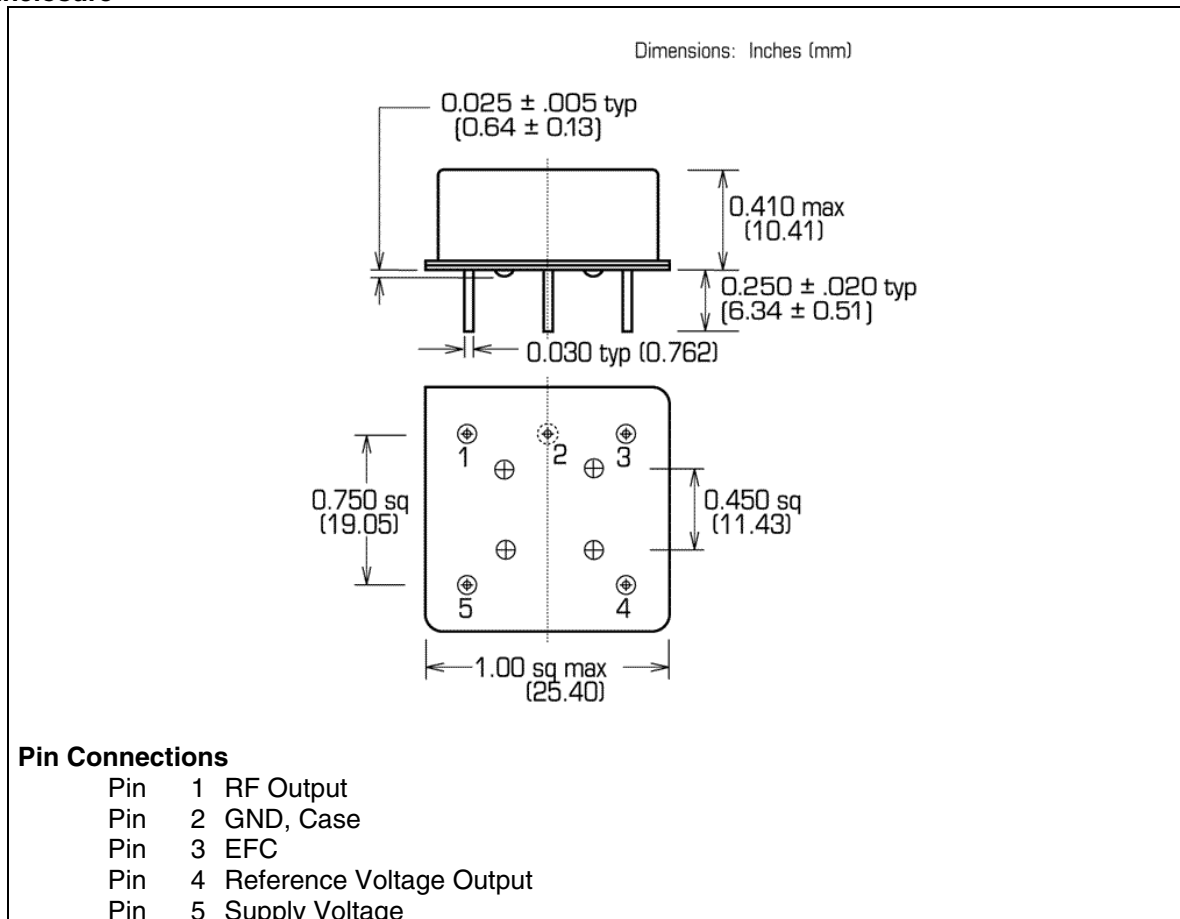
RF output

Parameter	Value	Condition
Signal	Sinewave / HCMOS ²	
Load	50 Ω	
Duty cycle	45 to 55 %	
Output power min	+ 3 dBm	
Output power max	+ 8 dBm	
Harmonics	- 30 dBc	

Supply Voltage

Parameter	Value	Condition
Supply voltage (Vs)	5 V ± 5 %	@ 25°C
Supply voltage B (Vs B)	12 V ± 5 %	
Supply voltage C (Vs C)	3.3 V ± 5 %	
Power consumption steady state	< 1.0 W	
Power consumption during warm up	< 3.0 W	
Reference Voltage output	0 to 4 V	

Enclosure



Additional Parameters

Parameter	Value	Condition
Phase Noise	<- 75 dBc	1Hz Note 1
	<-100 dBc	10Hz
	<-130 dBc	100Hz
	<-140dBc	1kHz
	<-150dBc	10kHz
Warm-up time	< 3 min	@25°C to final frequency within ± 0.1ppm
Processing	Tech_Note_1	
Packaging	Tech_Note_2	

Notes

- Typical values @ 10 MHz
 - HCMOS can drive TTL, ACMOS, HCMOS and CMOS
- Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C)