Typical Applications

PCS Base Stations
Cellular Base Stations
Synthesisers
Test Equipment
Digital Switching

Features

Low Profile, Compact Package
Excellent Frequency vs. Temperature Stability
Fast Warm-up
SC-Cut Crystal

Frequency range **10 MHz – 26 MHz**

Standard frequencies 10MHz

Frequency stabilities

Parameter	Code	Frequency stability	Operating temp range
vs. operating temperature range	B79	± 7 ppb	0....50°C
	B59	± 5 ppb	
	C99	± 9 ppb	0.....70°C
	C79	± 7 ppb	
	D28	± 20 ppb	-20....+70°C
	D158	± 15 ppb	
	E38	± 30 ppb	-40....+85°C
	E258	± 25 ppb	
Parameter		Value	Condition
vs. aging /daily[1] vs. aging /1 Year		< ± 1 ppb < ± 0.1 ppm	after 72 hours of operation

Frequency tuning

Parameter	Value	Condition
Electrical frequency control (EFC): Pulling slope	> ± 1 ppm typical Positive	Sufficient for 15 yrs.

RF output

Parameter	Value	Condition
Signal	Sinewave / HCMOS[2]	
Load	50Ω	
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 %	
Supply voltage B (Vs B)	12 V ± 5 %	
Supply voltage C (Vs C)	3.3 V ± 5 %	
Power consumption steady state	< 1.0 W	@ 25°C
Power consumption during warm up	< 3.0 W	
Reference Voltage output	0 to 4 V	

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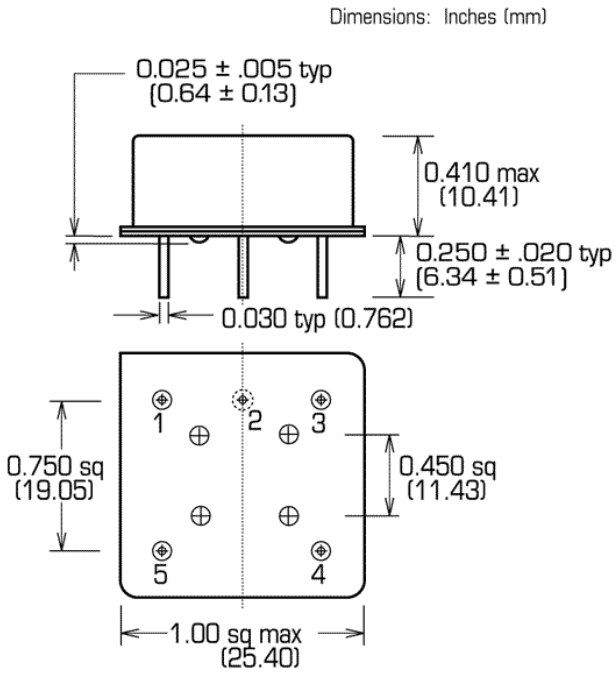
Enclosure



Pin Connections

Pin 1 RF Output
Pin 2 GND, Case
Pin 3 EFC
Pin 4 Reference Voltage Output or N/C
Pin 5 Supply Voltage

Additional Parameters

Parameter	Value	Condition	
Phase Noise	<- 80 dBc	1Hz	Note 1
	<-120 dBc	10Hz	
	<-140 dBc	100Hz	
	<-145 dBc	1kHz	
	<-150 dBc	10kHz	
Warm-up time	< 3 min	@25°C to final frequency within ± 0.1ppm	
Processing	Tech_Note_1		
Packaging	Tech_Note_2		

Notes

1 Typical values @ 10 MHz
2 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)

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