

Typical Applications

Base Stations
Test Equipment
Synthesizers

Features

AT-Cut Crystal
Dual-inline oscillator
Hermetically Sealed Package

Surface Mount Option



Frequency range

1 MHz – 8 MHz

Standard frequencies

Frequency stabilities

Parameter	Code II	Frequency stability	Operating temp range
vs. operating temperature range	34	± 15 ppm	-40 ... +90°C
	32	± 10 ppm	-30 ... +80°C
	10	± 50 ppm	-20 ... +70°C
	12	± 20 ppm	
	14	± 10 ppm	
	16	± 7.5 ppm	
	18	± 5 ppm	
Parameter	Code I	Frequency stability	Condition
Initial tolerance	01	± 100 ppm	@ 25C
	02	± 50 ppm	
	03	± 20 ppm	
	05	± 10 ppm	
	07	± 5 ppm	

RF output

Parameter	Value	Condition
Signal	HCMOS	@ 15pF & 10 to 90% @ Vs/2
Load	15pF ± 10%	
Rise and Fall time	< 5ns	
Duty cycle	40/60 %	

Supply voltage

Parameter	Value	Condition
Supply voltage (V _S)	5.0 V ± 5 %	
Current consumption	< 20 mA	

Additional parameters

Parameter	Value	Condition	
Phase Noise	< - 80 dBc/Hz	10 Hz	Note 1
	< - 110 dBc/Hz	100 Hz	
	< - 135 dBc/Hz	1 kHz	
	< -145 dBc/Hz	10 kHz	
	< - 150 dBc/Hz	100 kHz	
Weight	< 6 g		
Operable temperature range	-40 ... +90°C		
Storage temperature range	-55 ... +125°C		
Processing & Packing	handling&processing note		

Additional Parameters

Parameter	Option I	Condition
Screening	S	Screening MIL STD 883 C method 5008.2 class B
	B	Screening MIL-O-55310, Class B
	C	Screening MIL-O-55310, Class C

Enclosure

Type	Option II	Case	Condition
	Blank	G125	
	A	G175	

Drawing

G 125
H = 7,5max.; G125 Standard

G 175
H = 9,4; G175 Standard

Pin Connections

Pin 1	N.C.
Pin 7	GND, Case
Pin 8	RF-Output
Pin 14	Supply voltage (Vs)

all units in mm

Ordering Code	Code I Adjustment tolerance	Code II Frequency Stability	Option I Screening	Option II Case	Frequency
Example: Order: TQDILC	05.	14.		A	4M0000
TQDILC					

Note

1 Typical values @ 4 MHz

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)
Subject to technical modification; Not all options and codes are available at all Frequencies