

Typical Applications

Base Stations
Test Equipment
Synthesizers

Features

AT-Cut Crystal
Dual-inline AC MOS-oscillator
Hermetically Sealed Package
Surface Mount Option



Frequency range

8 MHz – 80 MHz

Standard frequencies

10MHz; 16.384;19.44; 77.76 MHz

Frequency stabilities

Parameter	Code III	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	± 5.0 ppm	
	37	± 10 ppm	0 ... +50°C
	29	± 5.0 ppm	
Parameter	Code II	Frequency stability	Condition
Initial tolerance	01	± 100 ppm	@ 25°C
	02	± 50 ppm	
	03	± 20 ppm	
	05	± 10 ppm	
	07	± 5 ppm	

RF output

Parameter	Value	Condition
Signal	ACMOS	@ 25pF & 10 to 90% @Vs/2
Load	25pF $\pm 10\%$	
Rise and Fall time	< 5ns	
Duty cycle	40/60 %	

Supply voltage

Parameter	Value	Condition
Supply voltage (Vs)	5.0 V $\pm 5\%$	
Current consumption	< 60 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	-60 ... +105°C		
Processing & Packing	handling&processing note		

Enclosure

Type	Option I	Case	Condition
	Blank	G125	
	A	G175	

Drawing G 125 H = 7,5max.; G125 Standard	G 175 H = 9,4; G175 Standard
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Pin Connections				all units in mm	
Pin 1	Tri-State Control or N.C.	Code I	Pin 1	Output Pin8	
Pin 7	GND	E	Tri-State	High	Output clock
Pin 8	RF output			Open	
Pin 14	Supply Voltage (V _s)			Low	High resistance output
		Blank	N.C.		

Ordering Code	Code I	Code II	Code III	Option I	
Model	Enable	Adjustment tolerance	Frequency Stability	Case	Frequency
Example: TQDILAC	E	05.	14.	A	30M00000
Order: TQDILAC					

Note

1 Typical values @ 10 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