

Typical Applications

PCS Base Stations
Land Mobile Radio
Cellular Telephony
Radio in the Local Loop
Test Equipment

Features

EFC Standard
Standard (20 x 20mm) Package
Hermetically Sealed Package
Wide Temperature Range
High Stability



Frequency Range

0.5 MHz – 80 MHz

Standard Frequencies

10; 16.384; 19.44; 38.88; 77.76 MHz

Frequency stabilities

Parameter	Code I	Frequency stability	Operating temp range
vs. Operating temperature range	07	± 2.0 ppm	-40....+85°
	08	± 1.0 ppm	
	03	± 2.0 ppm	-20....+70°C
	04	± 1.0 ppm	
	05	± 1.0 ppm	0....50°C
	06	± 0.5 ppm	
Parameter	Value		Condition
vs. Supply voltage change	$< \pm 0.2$ ppm		$V_S \pm 5\%$
vs. Load change	$< \pm 0.1$ ppm		Load $\pm 5\%$
vs. Aging / year	$< \pm 1.0$ ppm		

Frequency tuning

Parameter	Option	Value	Condition
Mechanical (No EFC)	T	$> \pm 5.0$ ppm	(internal trimmer)
Electrical freq. control (EFC)	U	$> \pm 5.0$ ppm	Note 1 @ $V_S = 5.0$ V & 3.3 V
Voltage range		0.0 V to 2.0 V	
Pulling slope		negative	
Freq. control input impedance		> 10 k Ω	

RF output

Parameter	Code III	Value	Condition
Signal	06	HCMOS	
Load		25pF $\pm 10\%$	@ < 20 MHz
		15pF $\pm 10\%$	@ ≥ 20 MHz
Duty cycle		40/60%	@ $V_S/2$
Subharmonics		< -45 dBc	@ > 33 MHz

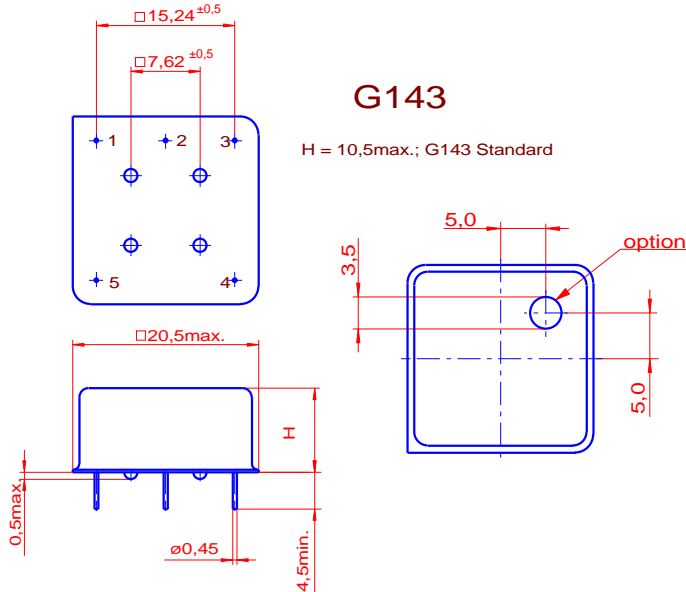
Supply voltage

Parameter	Code II	Value	Condition
Supply voltage (V_S)	05	5.0 V $\pm 5\%$	
Current consumption		3 mA to 10 mA	Sinewave
		5 mA to 50mA	HCMOS
Supply voltage (V_S)	33	3.3 V $\pm 5\%$	
Current consumption		3 mA to 10 mA	Sinewave
		5 mA to 50 mA	HCMOS

Additional parameters

Parameter	Value	Condition
Phase Noise	<- 105 dBc/Hz	10 Hz
	<-135 dBc/Hz	100 Hz
	<-145 dBc/Hz	1 kHz
	<-150 dBc/Hz	10 kHz
	<-155 dBc/Hz	100 kHz
Weight	< 10 g	
Operable temperature range	-40 ... +90°C	
Storage temperature range	-55 ... +105°C	
Processing & Packing	handling&processing note	

Enclosure

Type	G143																			
Drawing	 <p style="text-align: right;">all units in mm</p>																			
Pin Connections	<table border="0"> <tr> <td>Pin 1</td><td>Supply Voltage (V_s)</td><td></td></tr> <tr> <td>Pin 2</td><td>RF output</td><td></td></tr> <tr> <td>Pin 3</td><td>GND, case</td><td></td></tr> <tr> <td>Pin 4</td><td>Control Voltage (V_c)</td><td>Option U</td></tr> <tr> <td>Pin 4</td><td>N.C.</td><td>Option T</td></tr> <tr> <td>Pin 5</td><td>N.C.</td><td></td></tr> </table>		Pin 1	Supply Voltage (V _s)		Pin 2	RF output		Pin 3	GND, case		Pin 4	Control Voltage (V _c)	Option U	Pin 4	N.C.	Option T	Pin 5	N.C.	
Pin 1	Supply Voltage (V _s)																			
Pin 2	RF output																			
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Pin 4	Control Voltage (V _c)	Option U																		
Pin 4	N.C.	Option T																		
Pin 5	N.C.																			
		Electrical freq. Control Mechanical freq. Control																		

Ordering Code	Option	Code I	Code II	Code III	
Model	Frequency tuning	Frequency Stability	Supply Voltage	RF Output	Frequency
Example: CC0100	T	03.	05.	02.	10M00000
Order: CCO100					

Notes

- Other available
- 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 are available at all Frequencies