

OCXOVT-SAR family package DIL14 Sine wave Cospas Sarsat compliant



Package:

20.20

Pin out

Pin 1 = GND

Pin 7 = GND

Pin 8 = Fout

Pin 14 = Vdd

Pin 14 = Vdd

All dimensions in mm typical

Oven control quartz crystal oscillator Fundamental mode frequency High shock and vibration resistance Wide temperature range Low aging (sealed under vaccum) Customer specification on request Very fast warm up Low power consumption Swiss made quality

DESCRIPTION:

This DIL 14 package has been specially designed for the applications:

- Cospas-Sarsat
- Airbone equipments

The OCXO are supplied on trays (50 pcs/tray).

ELECTRICAL CHARACTERISTICS AT 25°C

Frequency versus temperature -40 to +55°C after 15mm switch on and ramp of +5°C / h		ΔF/F	< ± 3E-9 / 50s	
Frequency long terrincluded: calibration		ΔF/F	< ± 4.5	ppm
Frequency calibration	n (pin 1 to GND)	ΔF/F	≤ ± 1	ppm
Supply voltage		Vdd	5	V
Input current		ldd	see table 1	
Output signal			sine wave	
Level			> 1V peak to peak	
Start-up time			<5	ms
Load min / max			5/15	pF
Frequency stability versus load ± 10%		ΔF/F	≤ ± 10	ppb
Warm-up within ± 0.1 ppm at +25°C		t	≤ 60	s
Stability versus Vdd		ΔF/F	≤ ± 0.1	ppm
Stability 0.1 to 30s 5E-11 typ at 1s		Tau	< 5	E-10
Phase noise typical a In static conditions BW = 1Hz	10 MHz 10Hz 100Hz 1 kHz 10 kHz		-100 -130 -140 -145	dBc/ Hz

TABLE 1: Idd

Temperature	Vdd = 5V ± 0.2V
+25°C -20°C	40 mA 70 mA
start-up current at -40°C max during 10s	350 mA

STANDARD FREQUENCIES:

Frequency «MHz»				
5.075350	5.075312	10.150625		
10.1500700	12.688281	12.688375		
Other frequencies between up to 54 MHz on request				

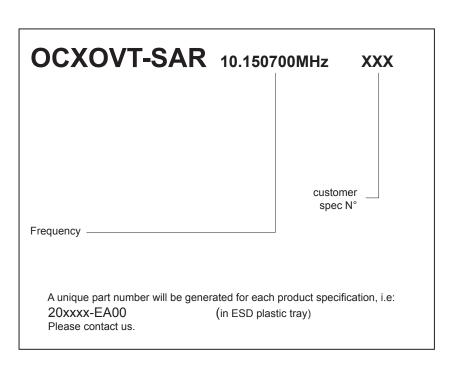
ENVIRONMENTAL CHARACTERISTICS:

Storage temp. range	-55 to +125°C
Vibration resistance	10 to 2000Hz / 20g
Shocks resistance	500g / 4ms / ½ sine 6 directions 100g / 23ms / ½ sine 6 directions

TERMINATIONS AND PROCESSING:

Thermal Shocks	25 cycles -55 to 85°C
Life test	1000 hours
Warm storage aging	1000 hours
Pins soldering	+235°C / 10s max +260°C / 5s max
Package SMD version option D1 or D2 see application note	Dil 14.4 pins GND to case height = 8mm

PRODUCT DESCRIPTION AND ORDERING INFORMATION:





Micro Crystal AG Mühlestrasse 14 CH-2540 Grenchen Switzerland Tel. +41 32 655 82 82 Fax +41 32 655 80 90 sales@microcrystal.com www.microcrystal.com