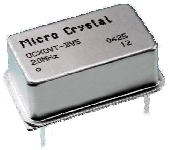

SHORTFORM OCXO DIL 14 PACKAGE

MICRO CRYSTAL SWITZERLAND

MODEL	OCXOW	OCXOWT	SCOCXOWT	OCXOV / OCXOVT / SCOCXOVT			OCXO / OCXOT / SCOCXOT		
Power Supply Voltage		**3.3 V**			**5.0 V**			**12.0 V**	
Input current @ +30°C		< 110 mA			< 80 mA			< 30 mA	
Input current @ -20°C		< 170 mA			< 120 mA			< 45 mA	
Warm-up current		**< 250 mA**			**< 250 mA**			**< 250 mA**	
Duration		**30s**			**10s**			**10s**	
Frequency Range		up to 54 MHz			up to 54 MHz			up to 54 MHz	
Long Term stability	OCXO**W (S)**	OCXO**WT (S)**	**SC**OCXO**WT (S)**	OCXO**V (S)**	OCXO**VT (S)**	**SC**OCXO**VT (S)**	OCXO **(S)**	OCXO**T (S)**	**SC**OCXO**T (S)**
1st year	< ± 0.7 ppm	< ± 0.7 ppm	< ± 0.3 ppm	< ± 0.7 ppm	< ± 0.7 ppm	< ± 0.3 ppm	< ± 0.7 ppm	< ± 0.7 ppm	< ± 0.3 ppm
10years	< ± 4.0 ppm	< ± 4.0 ppm	< ± 2.5 ppm	< ± 4.0 ppm	< ± 4.0 ppm	< ± 2.5 ppm	< ± 4.0 ppm	< ± 4.0 ppm	< ± 2.5 ppm
Temperature Range	**A :**	0°C to +60°C		**A :**	0°C to +60°C		**A :**	0°C to +60°C	
	B :	-20°C to +70°C		**B :**	-20°C to +70°C		**B :**	-20°C to +70°C	
	C :	-40°C to +85°C		**C :**	-40°C to +85°C		**C :**	-40°C to +85°C	
Stabilty vs Trange	OCXO**W (S)**	OCXO**WT (S)**	**SC**OCXO**WT (S)**	OCXO**V (S)**	OCXO**VT (S)**	**SC**OCXO**VT (S)**	OCXO **(S)**	OCXO**T (S)**	**SC**OCXO**T (S)**
Refer to 25°C	**A :** ≤ ± 0.2 ppm	≤ ± 0.075 ppm	≤ ± 0.05 ppm	**A :** ≤ ± 0.2 ppm	≤ ± 0.075 ppm	≤ ± 0.025 ppm	**A :** ≤ ± 0.2 ppm	≤ ± 0.075 ppm	≤ ± 0.025 ppm
	B : ≤ ± 0.3 ppm	≤ ± 0.15 ppm	≤ ± 0.075 ppm	**B :** ≤ ± 0.3 ppm	≤ ± 0.15 ppm	≤ ± 0.05 ppm	**B :** ≤ ± 0.3 ppm	≤ ± 0.15 ppm	≤ ± 0.05 ppm
	C : ≤ ± 0.5 ppm	≤ ± 0.25 ppm	≤ ± 0.1 ppm	**C :** ≤ ± 0.5 ppm	≤ ± 0.25 ppm	≤ ± 0.1 ppm	**C :** ≤ ± 0.5 ppm	≤ ± 0.25 ppm	≤ ± 0.1 ppm
Output Signal	**H :**	HC-MOS compatible		**H :**	HC-MOS compatible		**H :**	HC-MOS compatible	
	S : < 20 MHz	> 1 Vpp / 1 KΩ > 4 dBm / 50Ω		**S : < 20 MHz**	> 1 Vpp / 1 KΩ > 4 dBm / 50Ω		**S : < 20 MHz**	> 1 Vpp / 1 KΩ > 4 dBm / 50Ω	
	S : > 20 MHz	> 0.63 Vpp / 1 KΩ > 0 dBm / 50Ω		**S : > 20 MHz**	> 0.63 Vpp / 1 KΩ > 0 dBm / 50Ω		**S : > 20 MHz**	> 0.63 Vpp / 1 KΩ > 0 dBm / 50Ω	
Frequency Control	OCXO**W (S)**	OCXO**WT (S)**	**SC**OCXO**WT (S)**	OCXO**V (S)**	OCXO**VT (S)**	**SC**OCXO**VT (S)**	OCXO **(S)**	OCXO**T (S)**	**SC**OCXO**T (S)**
	R1:	> ± 4 ppm (0 to 10KΩ)	> ± 2.5 ppm	**R1:**	> ± 4 ppm (0 to 10KΩ)	> ± 2.5 ppm	**R1:**	> ± 4 ppm (0 to 10KΩ)	> ± 2.5 ppm
	V3:	> ± 4 ppm (0 to 3.3V)	> ± 2.5 ppm	**V5:**	> ± 4 ppm (0.5 to 5.0V)	> ± 2.5 ppm	**V5:**	> ± 4 ppm (0.5 to 5.0V)	> ± 2.5 ppm
Phase Noise (BW = 1Hz)	Typical @ 10MHz in static conditions			Typical @ 10MHz in static conditions			Typical @ 10MHz in static conditions		
Output Signal		**H**	**S**		**H**	**S**		**H**	**S**
	10Hz	-100 dBc / Hz	-110 dBc / Hz	**10Hz**	-100 dBc / Hz	-110 dBc / Hz	**10Hz**	-90 dBc / Hz	-100 dBc / Hz
	100Hz	-130 dBc / Hz	-135 dBc / Hz	**100Hz**	-130 dBc / Hz	-135 dBc / Hz	**100Hz**	-120 dBc / Hz	-130 dBc / Hz
	1KHz	-140 dBc / Hz	-145 dBc / Hz	**1KHz**	-140 dBc / Hz	-145 dBc / Hz	**1KHz**	-130 dBc / Hz	-140 dBc / Hz
	10KHz	-145 dBc / Hz	-150 dBc / Hz	**10KHz**	-145 dBc / Hz	-150 dBc / Hz	**10KHz**	-145 dBc / Hz	-145 dBc / Hz
Short Term Stability	0.1s to 30s < $5 E^{-10}$ Typical @ 1s $5 E^{-11}$			0.1s to 30s < $5 E^{-10}$ Typical @ 1s $5 E^{-11}$			0.1s to 30s < $5 E^{-10}$ Typical @ 1s $5 E^{-11}$		

Customer's specification on request

SHORTFORM OCXO DIL 14 PACKAGE

MICRO CRYSTAL SWITZERLAND

	Stratum 3	
MODEL	**OCXOWST**	**OCXOVST**
Power Supply Voltage Vcc	**3.3V**	**5.0V**
Input current @ +30°C	< 110 mA	< 80 mA
Input current @ -20°C	< 160 mA	< 120 mA
Warm-up current	**< 250 mA**	**< 250 mA**
Duration	**up to 54 MHz**	**10s**
Frequency Range	up to 20 MHz	up to 54 MHz
Frequency Stability		
Overall included 15 Years Aging	**< ± 4.6 ppm**	
Holdover Stability During 24 hours Including Load, Supply Voltage, Temperature variation	**< ± 0.28 ppm**	
Temperature Range	**D :** 0°C to +70°C **C :** -40°C to +85°C	
Output Signal HC-MOS compatible		
Symmetry	45% - 55% @Vcc/2	
Rise and Fall Time	< 7 ns	
Level 0 and 1	V_{OL} <10% Vcc VOH >90% Vcc	
Fan Out (Load)	10LS or 47pF max.	
Frequency Control	Not applicable Pin 1 must be connected to ground *	
Frequency Internal Calibration	@ 25°C < ± 1ppm *	
Phase Noise (BW = 1Hz)	Typical @ 10MHz, static conditions	
10Hz	-100 dBc / Hz	
100Hz	-130 dBc / Hz	
1KHz	-140 dBc / Hz	
10KHz	-140 dBc / Hz	
Short Term Stability		
0.1s to 30s	< 5 E^{-10}	
Typical @ 1s	5 E^{-11}	

	Cospass Sarsat	
MODEL	**OCXOVT-SAR**	**OCXOT-SAR**
Power Supply Voltage Vcc	**5.0V**	**12.0V**
Input current @ +55°C	< 10 mA	< 10 mA
Input current @ +25°C	< 35 mA	< 30 mA
Input current @ -20°C	< 70 mA	< 55 mA
Warm-up current	**up to 54 MHz**	**< 250 mA**
Duration	**10s**	**10s**
Frequency Range	up to 20 MHz	up to 20 MHz
Frequency Stability		
Temperature Range	**-40°C to +55°C ***	
Stability over Temperature Range After 15mn Switch ON and with a slope of 5°C/h	**< ± 3E^{-9} / 50s ***	
Calibration and 5 Years Aging	**< ± 4.5 ppm**	
Supply Voltage	**< ± 0.1 ppm**	
Output Signal Clipped Sine Wave *		
Level	> 1Vpp	
Load	1KΩ // 10pF ±10%	
Frequency Control	Not applicable Pin 1 must be connected to ground *	
Frequency Internal Calibration	@ 25°C < ± 1ppm *	
Phase Noise (BW = 1Hz)	Typical @ 10MHz, static conditions	
10Hz	-90 dBc / Hz	
100Hz	-120 dBc / Hz	
1KHz	-130 dBc / Hz	
10KHz	-130 dBc / Hz	
Short Term Stability		
0.1s to 30s	< 5 E^{-10}	
Typical @ 1s	5 E^{-11}	

*** Customer's specification on request**