

OCXO OA265 - 8.5

- A miniature 14 pin DIL resistance weld package, 8.5mm tall manufactured to custom specifications over the frequency range of (10 ~ 100)MHz.
- The small volume allows fast warm up to within ± 0.1 ppm of nominal after just 5 minutes.
- Precision crystals provide excellent long term ageing from ± 4.6 ppm over 10 years.



Standard options:

frequency range:	_____ (10 ~ 100)MHz _____		
accuracy codes:	_____ (A) _____ (B) _____		
temperature tolerance	± 0.1 ppm	± 0.25 ppm	
temperature range	(-10 +60) $^{\circ}$ C	(-20 +70) $^{\circ}$ C	
output codes:	_____ (C) _____ (L) _____		
output	clipped sine wave, 1Vp/p, 1K//10pf harmonics -30dBc max.	CMOS 15pF, 45% ~ 55% <2ns max. rise and fall	
supply voltage codes:	_____ (V1) _____ (V2) _____ (V3) _____		
supply voltage	+3.3Vd.c.	+5.0Vd.c.	+12.0Vd.c.

Generic specification:

stability:

against supply voltage change
against load change
ageing short term

± 0.02 ppm max. for $V_{cc} \pm 5\%$
 ± 0.02 ppm max. for load $\pm 10\%$
 ± 0.005 ppm max. per day
after 30 days continuous operation
 ± 1.5 ppm max. first year
 ± 10 ppm min. typical, linearity $\pm 5\%$
100K Ω min.

ageing long term

voltage trim V_t
trim input impedance

power supplies:

supply voltage V_{cc}
start up current at min. temp. range
quiescent current at max. temp. range
warm up time
insulation resistance

+3.3Vd.c.	+5.0Vd.c.	+12.0Vd.c.
900mA max.	600mA max.	300mA max.
320mA max.	220mA max.	120mA max.
5 minutes max. to within 0.1ppm of nominal		
500Meg Ω min., 100Vd.c.		

phase noise:

single sideband, 1Hz bandwidth

-80dBc/Hz, $f_o + 10$ Hz
-100dBc/Hz, $f_o + 100$ Hz
-125dBc/Hz, $f_o + 1$ kHz

temperature:

operating range
storage range

(-10 +60) $^{\circ}$ C	(-20 +70) $^{\circ}$ C
(-40 +125) $^{\circ}$ C	(-40 +125) $^{\circ}$ C

Environmental conditions:

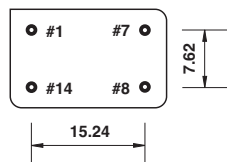
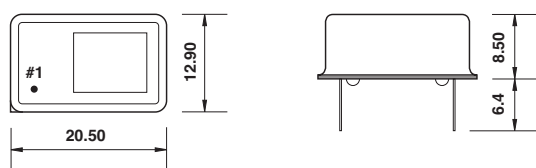
- mechanical shock:** MIL standard 202F, method 213, condition J
- thermal shock:** MIL standard 202F, method 107, condition A
- vibration:** MIL standard 202F, method 204, condition B
- solderability:** 5 seconds max. at +230°C, 3 seconds max. at +350°C

Marking: part number and frequency on high temperature metalised polyester label

Ordering code: **standard specification: OA265-10 A C V2 - 10.00M**
OA265 -10 = series generic code
A temp. tol. and temp. range code: **A = ±0.1ppm(-10 +60)°C**
C output code: **C = clipped sine wave, 1Vp/p, 1K//10pf**
V2 supply voltage code: **V2 = +5Vd.c. supply**
10.00M output frequency: **10.00M = 10.000MHz**

Custom specification: part number issued with custom specification and drawing

Dimensions(mm):

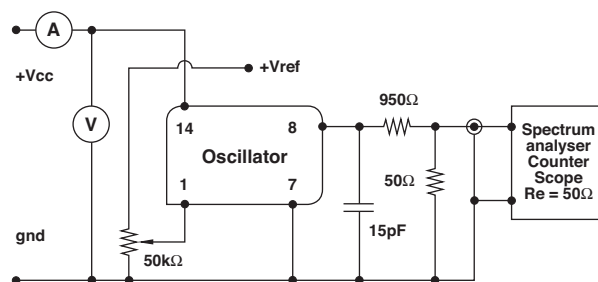


Pins viewed from bottom
pin diameter 0.45mm

Pin connections:

- #1 trim
- #7 ground/case
- #8 output
- #14 +V_{cc}

Test circuit, CMOS load:



test circuit includes a 20:1 step down into a matched 50Ω load