

TA265 - 8.5

- $\pm 1.0\text{ppm}$, excellent phase noise, low ageing
- A miniature 14 pin DIL resistance weld package, 8.5mm tall, manufactured to standard and custom specifications over the frequency range of 10MHz to 250MHz
- Precision crystals provide outstanding long term ageing from $\pm 4.6\text{ppm}$ over 10 years



Standard options:

frequency range:	_____ (10 ~ 250)MHz _____		
accuracy codes:	(A)	(B)	(C)
temperature tolerance	$\pm 1.0\text{ppm}$	$\pm 1.5\text{ppm}$	$\pm 2.0\text{ppm}$
temperature range	(-10 +60) $^{\circ}\text{C}$	(-20 +70) $^{\circ}\text{C}$	(-35 +70) $^{\circ}\text{C}$
output codes:	(S)	(L)	
output	sine wave, 0dBm into 50 Ω 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	$\pm 0.02\text{ppm max. for } V_{cc} \pm 5\%$		
against load change	$\pm 0.02\text{ppm max. for load } \pm 10\%$		
ageing short term	$\pm 0.005\text{ppm max. per day}$		
ageing long term	after 30 days continuous operation $\pm 1.5\text{ppm max. first year}$		
voltage trim V_t	$\pm 10\text{ppm min. typical, linearity } \pm 5\%$		
trim input impedance	100K Ω min.		
power supplies:	+3.3Vd.c.	+5.0Vd.c.	+12.0Vd.c.
supply voltage V_{cc}	50mA max. frequency dependent		
supply current	500Meg Ω min., 100Vd.c.		
insulation resistance			
phase noise:			
single sideband, 1Hz bandwidth	-80dBc/Hz, $f_o + 10\text{Hz}$ -100dBc/Hz, $f_o + 100\text{Hz}$ -125dBc/Hz, $f_o + 1\text{kHz}$		
temperature:			
operating range	(-10 +60) $^{\circ}\text{C}$	(-20 +70) $^{\circ}\text{C}$	(-35 +70) $^{\circ}\text{C}$
storage range	(-40 +125) $^{\circ}\text{C}$	(-40 +125) $^{\circ}\text{C}$	(-40 +125) $^{\circ}\text{C}$

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

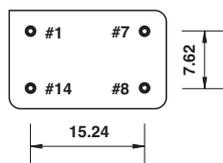
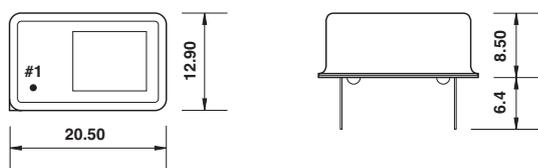
Marking: part number and frequency on high temperature metalised polyester label

Ordering code:

- standard specification:** TA265-8.5 A S V2 - 18.432M
TA265-8.5 = series generic code
A temp. tol. and temp. range code: A = $\pm 1.0\text{ppm}(-10 +60)^{\circ}\text{C}$
S output code: S = sine wave output, 0dBm into 50Ω
V2 supply voltage code: V2 = +5Vd.c. supply
18.432M output frequency: 18.432M = 18.432MHz

Custom specification: part number issued with custom specification and drawing

Dimensions(mm):

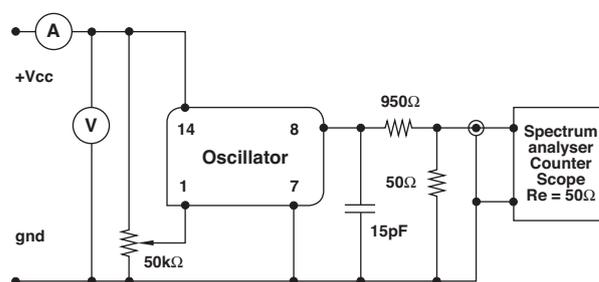


Pins viewed from bottom
pin diameter 0.45mm

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