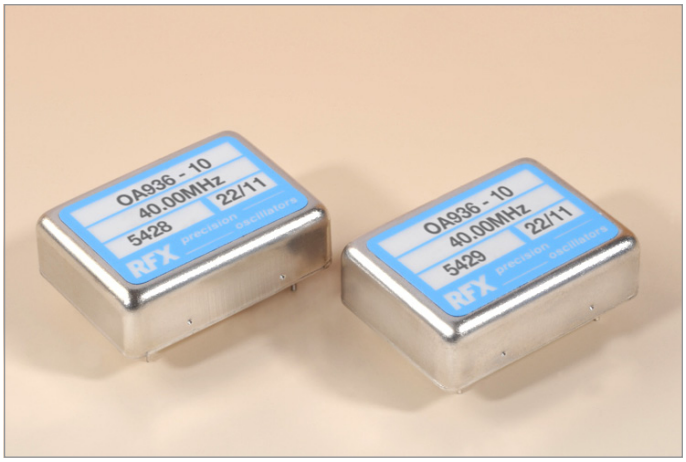
OCXO OA936 - 10

- ***Stability from ±0.05ppm, good phase noise from a precision AT cut crystal.***
- ***Standard and custom frequency range 1MHz to 1GHz.***
- ***Ageing from ±1ppm first year.***
- ***A standard hermetically sealed OCXO package providing a useful volume for the manufacture of high quality single oven specifications.***



Standard options:

frequency range:	*1MHz ~ 1GHz*		
accuracy codes:	*(A)*	*(B)*	*(C)*
temperature tolerance	*±0.05ppm*	*±0.1ppm*	*±0.2ppm*
temperature range	*(0 +50)°C*	*(-10 +60)°C*	*(-20 +70)°C*
output codes:	*(S)*		*(L)*
output	*sine wave, 0dBm into 50Ω*		*CMOS 15pF, 45% ~ 55%*
harmonics -30dBc max.	*<2ns max. rise and fall*		
supply voltage codes:	*(V1)**	*(V2)**	*(V3)**
supply voltage	*+3.3Vd.c.*	*+5.0Vd.c.*	*+12.0Vd.c.*
*voltage reference option**	*+3.0Vd.c.*	*+4.5Vd.c.*	*+4.5Vd.c.*

**add suffix (R) for V_{ref} output on pin #2*

Generic specification:

stability:			
against supply voltage change	*±0.02ppm max. for V_{cc} ±5%*		
against load change	*±0.02ppm max. for load ±10%*		
ageing short term	*±0.005ppm max. per day after 30 days continuous operation*		
ageing long term	*±1ppm max. first year*		
voltage trim V_t	*±10ppm min. typical, linearity ±5%*		
trim input impedance	*100KΩ min.*		
power supplies:			
supply voltage V_{cc}	*+3.3Vd.c.*	*+5.0Vd.c.*	*+12.0Vd.c.*
start up current at min. temp. range	*900mA max.*	*600mA max.*	*300mA max.*
quiescent current at max. temp. range	*320mA max.*	*220mA max.*	*120mA max.*
warm up time	*5 minutes max. to within 0.1ppm of nominal*		
insulation resistance	*500MegΩ min., 100Vd.c.*		
phase noise:			
single sideband, 1Hz bandwidth	*-90dBc/Hz, f_o+10Hz* *-125dBc/Hz, f_o+100Hz* *-140dBc/Hz, f_o+1kHz*		
temperature:			
operating range	*(0 +50)°C*	*(-10 +60)°C*	*(-20 +70)°C*
storage range	*(-40 +125)°C*	*(-40 +125)°C*	*(-40 +125)°C*

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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: OA936-10 A S V2* - 10.00M

OA936-10 ***= series generic code***

A *temp. tol. and temp. range code:* ***A = ±0.05ppm(0 +50)°C***

S *output code:* ***S = sine wave output, 0dBm into 50Ω***

V2* *supply voltage code:* ***V2 = +5Vd.c. supply***

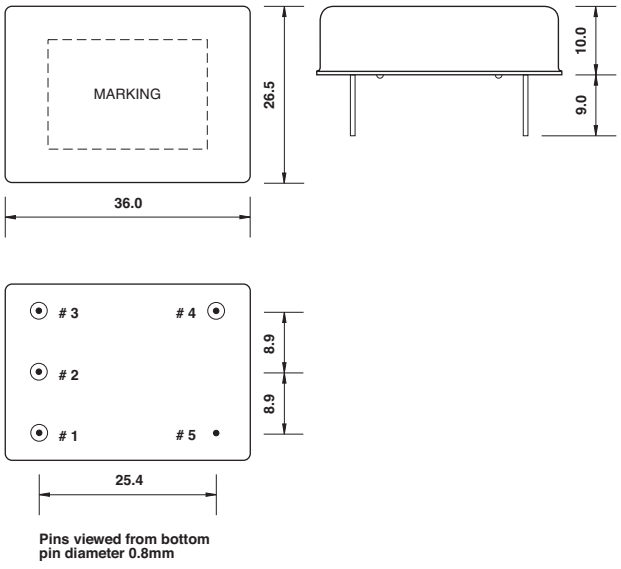
**add suffix (R) for V_{ref} output on pin #2*

10.00M *output frequenc:* ***10.00M = 10.000MHz***

Custom specification:

part number issued with custom specification and drawing

Dimensions(mm):

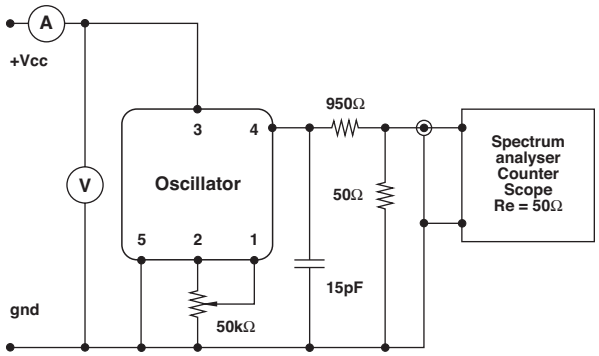


Pins viewed from bottom
pin diameter 0.8mm

Pin connections:

# 1	*trim*
# 2	*n.c. or trim reference voltage**
# 3	*+V_{cc}*
# 4	*output*
# 5	*ground/case*

Test circuit, CMOS load:



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

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