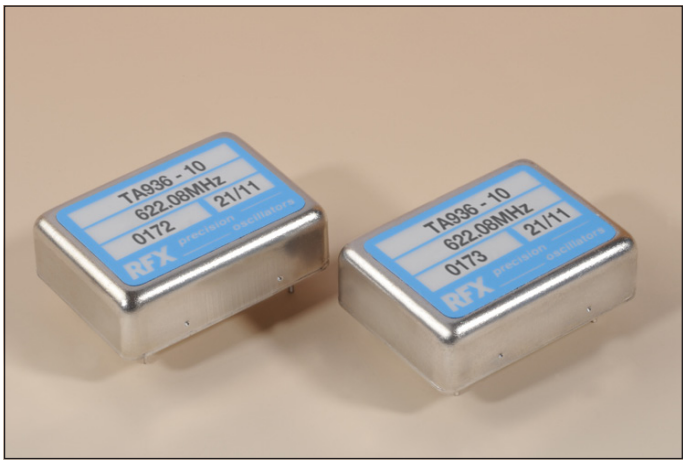
TA936 - 10

- **±0.5ppm, excellent phase noise, low ageing, wide frequency range.**
- **Manufactured to standard and custom specifications over the frequency range of 1MHz to 1GHz.**
- **Precision crystals provide outstanding long term ageing from ±4.6ppm over 10 years.**



Standard options:

frequency range:	1MHz ~ 1GHz		
accuracy codes:	(A)	(B)	(C)
temperature tolerance	±0.5ppm	±1.0ppm	±2.0ppm
temperature range	(0 +50)°C	(-20 +70)°C	(-40 +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.	+3.0Vd.c.	+3.0Vd.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	±1.5ppm 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.
supply current	50mA max. frequency dependent		
insulation resistance	500MegΩ min., 100Vd.c.		
phase noise:			
single sideband, 1Hz bandwidth	-80dBc/Hz, f_o+10Hz -100dBc/Hz, f_o+100Hz -125dBc/Hz, f_o+1kHz		
temperature:			
operating range	(0 +50)°C	(-10 +60)°C	(-40 +70)°C
storage range	(-40 +125)°C	(-40 +125)°C	(-40 +125)°C

Telephone: +44 (0)1903 740000, e-mail: sales@tfc.co.uk

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*

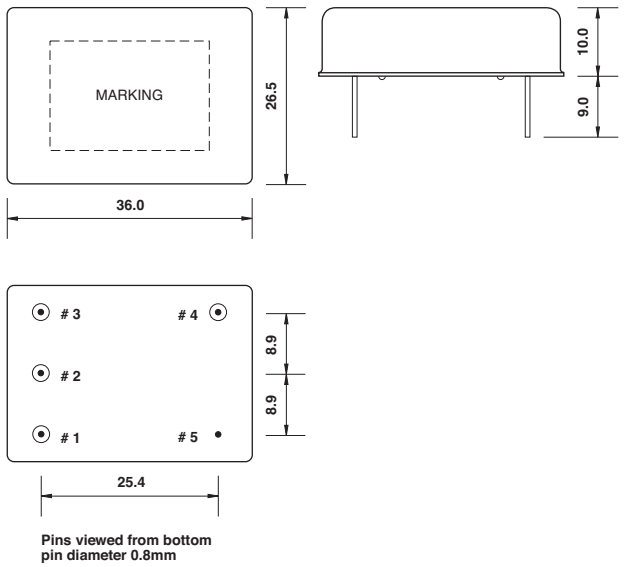
Marking: *part number and frequency on high temperature metalised polyester label*

Ordering code:

standard specification:	***TA936-10 A S V2* - 6.40M***
TA936-10	***= series generic code***
A	*temp. tol. and temp. range code:* ***A = ±0.5ppm(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*
6.40M	*output frequency:* ***16.384M = 16.384MHz***

Custom specification: *part number issued with custom specification and drawing*

Dimensions(mm):

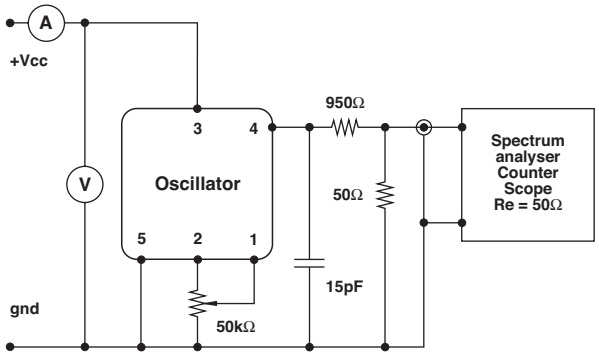


Pins viewed from bottom
pin diameter 0.8mm

Pin connections:

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

Test circuit, CMOS load:



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

Telephone: +44 (0)1903 740000, e-mail: sales@tfc.co.uk