

## Series V400-10 10.0MHz ~ 1GHz

- # wide pulling range
- # good linearity
- # hermetic seal
- # sinewave, CMOS



### Standard options:

**frequency range:**

10.0MHz ~ 1GHz

**accuracy codes:**

 temperature tolerance  
temperature range

(A)

 $\pm 10.0\text{ppm}$   
(0 +50) $^{\circ}\text{C}$ 

(B)

 $\pm 20\text{ppm}$   
(-20 +70) $^{\circ}\text{C}$ 
**output codes:**

output

(S)

 sine wave, 0dBm into 50 $\Omega$   
harmonics -30dBc max.

(L)

 CMOS 15pF, 45% ~ 55%  
<2ns max. rise and fall

**supply voltage codes:**

 supply voltage  
control voltage  $V_c$   
voltage control range

(V1)

+3.3Vd.c.

 (+1.5  $\pm$ 1.5)Vd.c.

 $\pm 100\text{ppm max.}^*$ 

(V2)

+5.0Vd.c.

 (+2.25  $\pm$ 2.25)Vd.c.

 $\pm 200\text{ppm max.}^*$ 

(V3)

+12.0Vd.c.

 (+2.25  $\pm$ 2.25)Vd.c.

 $\pm 300\text{ppm max.}^*$ 

control range is frequency dependent\*

### Generic specification:

**stability:**

 ageing long term  
control range linearity  
control voltage input impedance

 $\pm 2\text{ppm max. first year}$ 
 $\pm 10\%$ 

 100K $\Omega$  min.

**power supplies:**

 supply current  
insulation resistance

50mA max. frequency dependent

 500Meg $\Omega$  min., 100Vd.c.

**temperature:**

 operating range  
storage range

 (0 +50) $^{\circ}\text{C}$ 

 (-40 +125) $^{\circ}\text{C}$ 

 (-20 +70) $^{\circ}\text{C}$ 

 (-40 +125) $^{\circ}\text{C}$

## Series V400-10

### Environmental test conditions (on request):

**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:

frequency, date code, serial number on high temperature metalised polyester label

### Ordering code:

**standard specification:** V400-10 A S V2 - 155.52M

V400-10 = series generic code

A temp. tol. and temp. range code: A =  $\pm 10\text{ppm}(0 + 50)^\circ\text{C}$

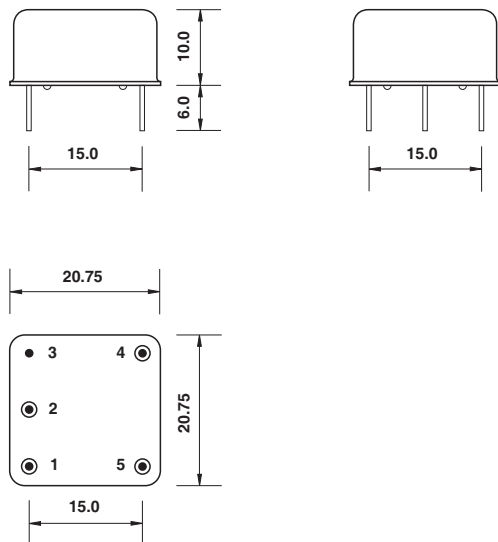
S output code: S = sine wave output, 0dBm into 50Ω

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

155.52M output frequency: 155.52M = 155.52MHz

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

### Dimensions(mm):

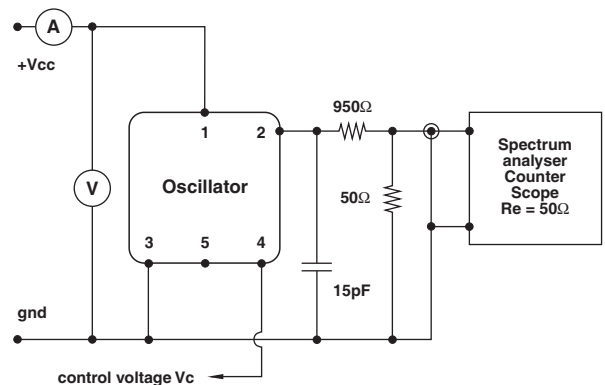


Pins viewed from bottom  
pin diameter 0.45mm

### Pin connections:

- #1 +V<sub>CC</sub>
- #2 output
- #3 ground/case
- #4 control voltage V<sub>c</sub>
- #5 n.c.

### Test circuit:



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