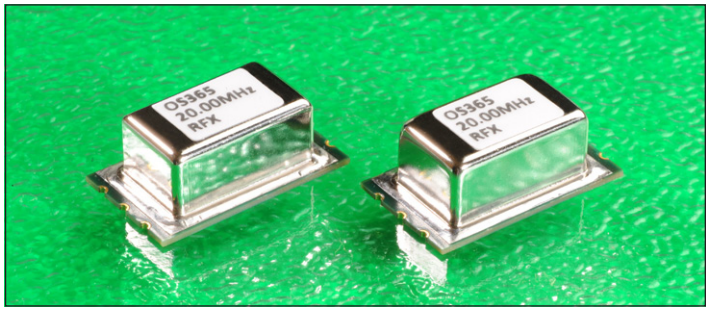
LAPTECH PRECISION

OCXO series OS365-9-smd

I²C programmable trim, ±0.02ppm stability, excellent phase noise, low ageing, fast warm up.

A miniature high quality smd OCXO combining minimum volume with exceptional performance from a precision SC cut resonator.

Manufactured to standard and custom frequencies 10MHz to 120MHz.



Standard options:

frequency range:	*(10 ~ 120)MHz*		
accuracy codes:	*(A)*		*(B)*
temperature tolerance	*±0.02ppm*		*±0.05ppm*
temperature range	*(-20 +60)°C*		*(-40 +70)°C*
output codes:	*(L)*		
output	*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	*±0.002ppm max. for V_{cc} ±5%*		
against load change	*±0.002ppm max. for load ±10%*		
ageing short term	*±0.0002ppm max. per day after 30 days continuous operation*		
ageing long term	*±0.05ppm max. first year after 30 days continuous operation*		
I2C programmable trim	*±1ppm typical*		
power supplies:			
supply voltage V_{cc}	*+3.3Vd.c.*	*+5.0Vd.c.*	*+12.0Vd.c.*
start up current at min. temp. range	*850mA*	*550mA max.*	*270mA*
quiescent current at max. temp. range	*350mA*	*220mA max.*	*110mA*
warm up time	*2 minutes max. to within 0.1ppm of nominal*		
insulation resistance	*500MegΩ min., 100Vd.c.*		
phase noise:			
single sideband, 1Hz bandwidth	*-110dBc/Hz, f_o+10Hz -145dBc/Hz, f_o+100Hz -160dBc/Hz, f_o+1kHz*		
temperature:			
operating range	*(-20 +60)°C*		*(-40 +70)°C*
storage range	*(-40 +125)°C*		*(-40 +125)°C*

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ISO9001: 2008
A1511CAN

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

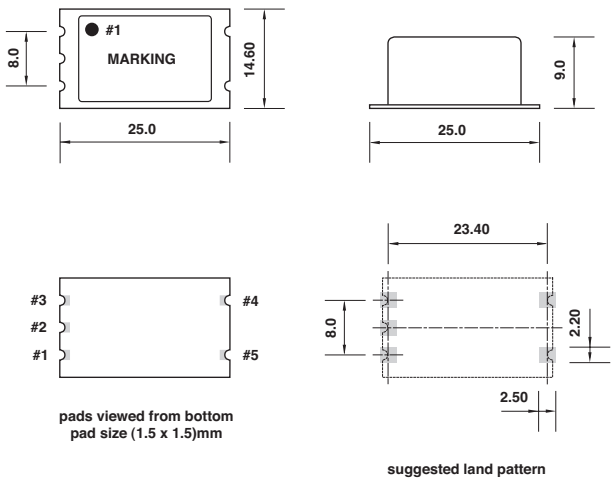
standard specification:

OS365-9-smd A L V1 - 10.00M

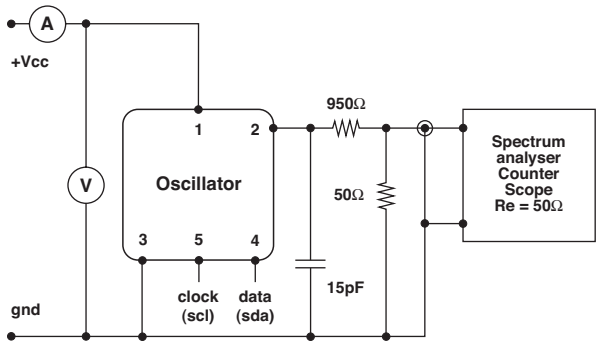
OS365-9-smd	**= series generic code**
A	temp. tol. and temp. range code: **A = ±0.02ppm(-20 +60)°C**
L	output code: **L = CMOS output, 15pF, 45% ~ 55%**
V1	supply voltage code: **V1 = +3.3Vd.c. supply**
10.00M	output frequency: **10.00M = 10.000MHz**

Custom specification: part number issued with custom specification and drawing

Dimensions(mm):



Test circuit, CMOS load:



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

Pin connections:

# 1	$+V_{cc}$
# 2	output
# 3	ground/case
# 4	data(sda)
# 5	clock(scl)

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