

## MINIATURE SMD TCXO

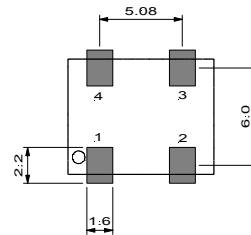
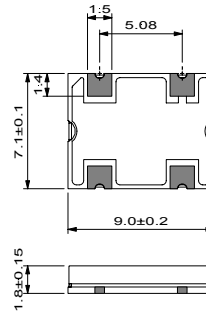
### TYPE DFA S3-KS / LS / US

**CRYSTAL PACKED INTO ITS OWN HOLDER**

**TRUE SINE WAVE OUTPUT**

**TIGHT STABILITIES**

**LOW PROFILE**



PC board footprint

Function	DFA S3
V control / GND	1
GND	2
Output	3
Vcc	4

TYPE	DFA S3-KS	DFA S3-LS	DFA S3-US
Frequency Range	10 to 20 MHz	10 to 20 MHz	10 to 20 MHz

ELECTRICAL SPECIFICATIONS	DFA S3-KS	DFA S3-LS	DFA S3-US
supply voltage	5 V ± 5 %	3.3 V ± 5 %	3.0 V ± 5 %
supply current ( no load)	≤ 2 mA	≤ 2 mA	≤ 2 mA
output load	sine wave 10 kΩ//10 pF	sine wave 10 kΩ//10 pF	sine wave 10 kΩ//10 pF
high/low levels or output amplitude	≥ 1.0 V p-p	≥ 1.0 V p-p	≥ 1.0 V p-p
harmonics	≤ -25 dBc	≤ -25 dBc	≤ -25 dBc
spurious	≤ -70 dBc	≤ -70 dBc	≤ -70 dBc
start-up	≤ 10 ms @ 4.75 V	≤ 10 ms @ 3.15 V	≤ 10 ms @ 2.85 V

FREQUENCY STABILITY			detailed tolerances [ ppm ]				
type	temperature range	model code	temperature	stability versus :			calibration @ 25°C
				Vcc ± 5 %	load ± 10 %	ageing	
all types	0 to 70°C	B0.5	≤ ± 0.5	≤ ± 0.3	≤ ± 0.3	≤ ± 1	≤ ± 1
	-20 to 70°C	C1.5	≤ ± 1.5				
	-30 to +75°C	N2.5	≤ ± 2.5				
Remarks			ageing is 1 <sup>st</sup> year at 25°C				

OPTIONS	CODE	DFA S3-KS	DFA S3-LS	DFA S3-US
voltage control ( positive slope )	V	≥ ± 5ppm, ≤ ± 15 ppm 2.5 V ± 2 V	≥ ± 5 ppm, ≤ ± 15 ppm 1.65 V ± 1.35 V	≥ ± 5 ppm, ≤ ± 15 ppm 1.5 V ± 1.0V

ORDERING CODE	type + option code + frequency + model code
Example	DFA S3-KSV 19.44 MHz N2.5

**IMPORTANT NOTE** IF NO CTRL VOLTAGE OPTION PIN 1 HAS TO BE GROUNDDED