

LOW POWER MINIATURE SURFACE MOUNT TCXO
DFA S3-KH (5 V) & LH (3.3 V)

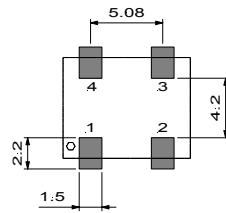
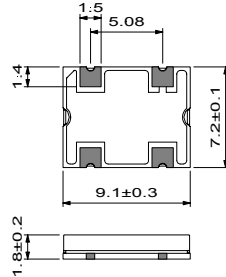
RECOMMENDED FOR NEW DESIGNS

HCMOS OUTPUT

CRYSTAL PACKED INTO ITS OWN HOLDER

EXTERNAL VOLTAGE CONTROL

LOW PROFILE



PC board footprint

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

PIN 1 TO BE GROUNDED IF NO CTRL VOLTAGE OPTION

TYPE	DFA S3-KH	DFA S3-LH
Frequency Range	5 to 25 MHz	5 to 25 MHz

ELECTRICAL SPECIFICATIONS			DFA S3-KH	DFA S3-LH
supply voltage			5 V ± 5 %	3.3 V ± 5 %
supply current (no load)			≤ 20 mA	≤ 10 mA
output load			HCMOS 15 pF or 2 TTL	HCMOS 15 pF or 2 TTL
duty cycle @ 50% level			45/55...55/45 %	45/55...55/45 %
rise/fall times (10 to 90 %)			≤ 5 ns	≤ 5 ns
high/low levels or output amplitude			≥ 4.5 V / ≤ 0.5 V	≥ 2.8 V / ≤ 0.3 V
start-up			≤ 10 ms @ 4.75 V	≤ 10 ms @ 3.15 V

FREQUENCY STABILITY			detailed tolerances [ppm]				
type	temperature range	model code	temperature	Vcc ± 5 %	load ± 10 %	ageing	calibration @ 25°C
all types	0 to 70°C	B0.5	≤ ± 0.5	≤ ± 0.3	≤ ± 0.1	≤ ± 1	≤ ± 1
	-20 to 70°C	C1.5	≤ ± 1.5				
	-30 to +75°C	N2.5	≤ ± 2.5				
remark			ageing is 1 st year at 25°C				

OPTIONS	CODE	DFA S3-KH	DFA S3-LH
voltage control (positive slope)	V	≥ ± 5ppm, ≤ ± 15 ppm 2.5 V ± 2 V	≥ ± 5 ppm, ≤ ± 15 ppm 1.65 V ± 1.35 V

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