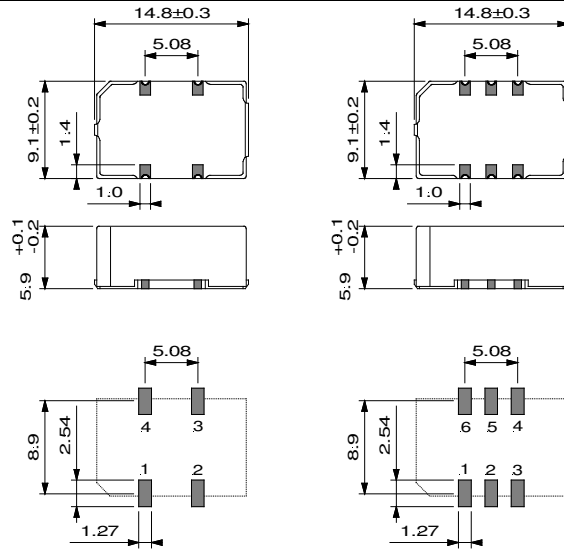


PRECISION SURFACE MOUNT VCXO

DFV S1-KH/KHZ (5 V) & DFV S1-LH/LHZ (3.3 V)

KEY FEATURES
2 to 130 MHz Tight stabilities Encapsulated crystal
APPLICATIONS
Sonet/SDH, Switching



Function	DFV S1-KH/LH	DFV S1-KHZ/LHZ
V control	1	1
E / D		2
GND	2	3
Output	3	4
NC		5
Vcc	4	6

TYPE	DFV S1-KH/KHZ	DFV S1-LH/LHZ
Frequency Range	2 to 100 MHz	4 to 130 MHz

ELECTRICAL SPECIFICATIONS		DFV S1-KH/KHZ	DFV S1-LH/LHZ
supply voltage		5 V ± 5 %	3.3 V ± 5 %
supply current (no load)	≤ 25 MHz ≤ 50 MHz > 50 MHz	≤ 10 mA (KH), ≤ 20 mA (KHZ) ≤ 40 mA ≤ 60 mA	≤ 10 mA ≤ 20 mA ≤ 40 mA
output load (HCMOS) duty cycle	≤ 50 MHz > 50 MHz	50 pF up to 25 MHz, 15 pF above 40/60...60/40 % @ 50% level 40/60...60/40 % @ 50% level	25 pF up to 25 MHz, 15 pF above 45/55...55/45 % @ 50% level 40/60...60/40 % @ 50% level
rise/fall times (@ 15 pF load)	≤ 25 MHz > 25 MHz	10 to 90 % : ≤ 10 ns ≤ 5 ns	10 to 90 % : ≤ 10 ns ≤ 3 ns
high/low levels start up		≥ 4.5 V / ≤ 0.5 V ≤ 10 ms @ 4.75 V	≥ 2.8 V / ≤ 0.3 V ≤ 10 ms @ 3.15 V

FREQUENCY STABILITY			detailed tolerances [ppm]						
type	temperature range	model code	stability versus:				pulling range positive function	control voltage	
			temp.	@ 25 °C	Vcc	load			ageing
DFV S1-K	0 to 70 °C	100B15	≤ ± 15	≤ ± 10	≤ ± 3	≤ ± 0.5	≤ ± 2	≥ ± 100	2.5 V ± 2 V
		100B25	≤ ± 25						
	100E25	≤ ± 25							
	100E50	≤ ± 50							
DFV S1-L	0 to 70 °C	100B15	≤ ± 15	≤ ± 10	≤ ± 3	≤ ± 0.5	≤ ± 2	≥ ± 100	1.5 V ± 1.5 V
		100B25	≤ ± 25						
	100E25	≤ ± 25							
	100E50	≤ ± 50							
remarks			input impedance ≥ 10 kΩ, modulation bandwidth ≥ 10 kHz @ -3dB ageing is 1 st year at 25 °C						

OPTIONS	CODE	
tighter symmetry (f ≤ 100 MHz)	R	45/55...55/45 %
control voltage (LH/LHZ only)	D	0.3 to 3.0 V, center @ 1.65 V (code placed into the model code : 100"D"B25)
tri-state control on pin 2	Z	high or open = enable, low = high Z (6 pads package)

ORDERING CODE	type + option code + frequency + model code
Example	DFV S1-LHRZ 44.736 MHz 100DB25