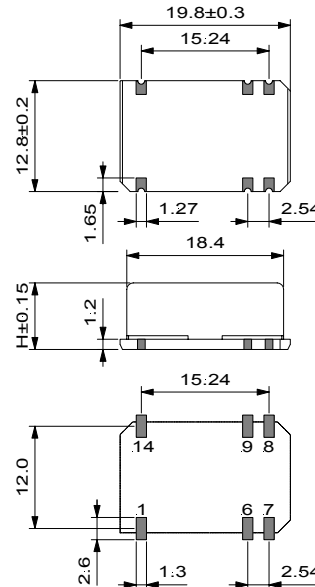*fordahl*

FREQUENCY CONTROL PRODUCTS

HIGH FREQUENCY SURFACE MOUNT VCXO

DFV S8-MLECPI (3.3 V)

KEY FEATURES

622 to 800 MHz

Parametric frequency multiplication

0.4 ps RMS jitter over 50 kHz to 80 MHz B.W.

APPLICATIONS

OC-192/Sonet/SDH

Function	DFV S8
V control	1
E / D	6
GND	7
Output 1	8
Output 2	9
Vcc	14

H = 9.30 mm

PC board footprint

TYPE	DFV S8-MLECPI
Frequency Range	622 to 800 MHz
Standard Frequencies	622.0800; 644.5313; 666.5143; 669.3266; 693.4828; 777.6000 MHz

ELECTRICAL SPECIFICATIONS	
supply voltage	3.3 V ± 5 %
supply current (no load)	$\leq$ 60 mA
output load	LVPECL 100 K (50 Ω to 1.3 V)
duty cycle @ 50% level	45/55...55/45 %
rise/fall times (20 to 80%)	$\leq$ 0.5 ns
high/low levels	$\geq$ 2.22 V/ $\leq$ 1.7 V
jitter RMS (12 kHz to 5 MHz)	0.08 ps typ; $\leq$ 0.10 ps
jitter RMS (12 kHz to 20 MHz)	0.12 ps typ; $\leq$ 0.15 ps
jitter RMS (50 kHz to 80 MHz)	0.32 ps typ; $\leq$ 0.40 ps
enable / disable on pin 6	low or open = enable, high = disable
complementary output on pin 9	180° phase shifted
start up	$\leq$ 10 ms @ 3.15 V

FREQUENCY STABILITY — detailed tolerances [ppm]

type	temperature range	model code	temp.	@ 25°C	Vcc	load	ageing	pulling range positive function	control voltage
DFV S8-MLECPI	0 to 70°C	100B20	$\leq$ ± 20	$\leq$ ± 10	$\leq$ ± 3	$\leq$ ± 0.5	$\leq$ ± 2	$\geq$ ± 100	1.65 V ± 1.35 V
		100B25	$\leq$ ± 25						
		100B50	$\leq$ ± 50						
	-40 to 85°C	100E30	$\leq$ ± 30						
remarks	input impedance $\geq$ 10 kΩ,								
	modulation bandwidth $\geq$ 10 kHz @ -3dB								
	ageing is 1st year at 25°C								

ORDERING CODE	type + option code + frequency + model code
Example	DFV S8-MLECPI 622.08 MHz 100B20