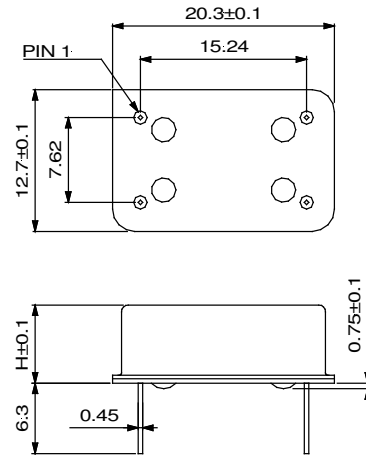


# HIGH FREQUENCY DIL-14 VCXO

## DFV 14-KEC (5 V) & DFV 14-LEC (3.3 V)

KEY FEATURES
<p><b>16 to 200 MHz</b></p> <p><b>Encapsulated crystal</b></p> <p><b>1 ps RMS jitter over 50 kHz to 80 MHz B.W.</b></p>
APPLICATIONS
<p><b>SDH/Sonet, Microwave transmissions</b></p>

Function	DFV 14
V control	1
GND	7
Output	8
Vcc	14



TYPE	DFV 14-KEC	DFV 14-LEC
Frequency Range	16 to 185 MHz	16 to 200 MHz

ELECTRICAL SPECIFICATIONS	DFV 14-KEC	DFV 14-LEC
supply voltage	$5 V \pm 5 \%$	$3.3 V \pm 5 \%$
supply current (no load)	$\leq 70 \text{ mA}$	$\leq 60 \text{ mA}$
output load	PECL 100 K ( $50 \Omega$ to 3 V )	LVPECL 100 K ( $50 \Omega$ to 1.3 V )
duty cycle @ 50% level	40/60...60/40 %	40/60...60/40 %
rise/fall times ( 20 to 80% )	$\leq 0.5 \text{ ns}$	$\leq 0.5 \text{ ns}$
high/low levels	$\geq 3.92 \text{ V} / \leq 3.45 \text{ V}$	$\geq 2.22 \text{ V} / \leq 1.7 \text{ V}$
jitter RMS ( 12 kHz to 5 MHz )	$\leq 0.5 \text{ ps}$	$\leq 0.5 \text{ ps}$
jitter RMS ( 50 kHz to 80 MHz )	$\leq 1 \text{ ps}$ ( $f = 155.52 \text{ MHz}$ )	$\leq 1 \text{ ps}$ ( $f = 155.52 \text{ MHz}$ )
start up	$\leq 10 \text{ ms}$ @ 4.75 V	$\leq 10 \text{ ms}$ @ 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 14-KEC	0 to 70°C	100B15	$\leq \pm 15$	$\leq \pm 10$	$\leq \pm 3$	$\leq \pm 0.5$	$\leq \pm 2$	$\geq \pm 100$	$2.5 \text{ V} \pm 2 \text{ V}$
		100B25	$\leq \pm 25$						
DFV 14-LEC	0 to 70°C	100B15	$\leq \pm 15$	$\leq \pm 10$	$\leq \pm 3$	$\leq \pm 0.5$	$\leq \pm 2$	$\geq \pm 100$	$1.65 \text{ V} \pm 1.35 \text{ V}$
		100B25	$\leq \pm 25$						
remarks			input impedance $\geq 10 \text{ k}\Omega$ ,						
			modulation bandwidth $\geq 10 \text{ kHz}$ @ -3dB						
			ageing is 1 <sup>st</sup> year at 25°C						

ORDERING CODE	type + option code + frequency + model code
Example	DFV 14-LEC 155.52 MHz 100B15

REMARK	Please consult factory for -40 to +85°C versions
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