

Static sensitive device

NEW PART! - Recommended for new designs

Frequency Stability Options

Operating Temperature Range		Frequency Stability (PPM)		
		±25	±50	±100
Standard	-0°C to +70°C	AS	BS	CS
Industrial	-40°C to +85°C	AI	BI	CI

Marking & Specification Code Format

Type	Voltage Code	OTR/Stability	Frequency	WWYY
HCK-631	2 or 3	See Above	ie 175.0000	1611

Operating Conditions

Storage Temp	-55°C to +125°C
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Option Codes

Supply Voltage	Option Code
+3.3V DC	3
+2.5V DC	2

Electrical Characteristics Ta = +25°C, ^{Note}Inclusive of V_{DD} ±10%, Load Change ±10%, Ageing, Shock & Vibration

Parameter	Condition	Value						
Model		AEL HCK-631						
Technology		Femto second integrated phase jitter						
Frequency Range		40.00MHz - 200.00MHz						
Duty Cycle	@50% V _{DD} Level	50% ±5% Measured at Q & Complimentary Q Cross point						
Output Voltage	"1" Level	660 mV Min : 740mV Typ : 850mV Max						
	"0" Level	-150mV Min : 0mV Typ : 780mV Max						
Output swing		620mA Min. : 700mV Typ. : 780mV Max.						
Input Current		18mA Typ. : 30mA Max.						
Rise Time	20%-80% of Wave	0.15ns Typ : 0.4ns Max						
Fall Time	80%-20% of Wave	0.15ns Typ : 0.4ns Max						
Start Up Time	0V to V _{DD}	3ms Typ. : 10ms Max.						
Integrated Phase Jitter	12kHz to 20MHz	200 fs Typ.						
SSB Phase Noise (dBc/Hz) Typ.	Offset	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz	10MHz
	125MHz	-50	-82	-116	-138	-144	-149	-155
Load		RL=50Ω to ground on each output						
Ageing	per Year Max.	±3PPM						
Tri-State Function	Pin 1 = No Connection	Output = Yes						
	Pin 1 = ≥ 70% V _{DD}	Output = Yes						
	Pin 1 = ≤ 30% V _{DD}	High Impedence Condituion Output = No						
	Standby Current	10μA Typ.						
	Enable Time	2.0msec Max.						
	Disable Time	2.0μsec Max.						

Dimensions (mm)

