

Frequency Stability Options							
Operating Temperature Range		Frequency Stability (PPM)					
Available Options		±15	±20	±25	±30	±50	±100
Standard	0°C to +70°C	ES	DS	AS	FS	BS	CS
Industrial	-40°C to +85°C	EI	DI	AI	FI	BI	CI
Military	-55°C to +125°C	N/A	N/A	N/A	N/A	N/A	CM

Operating Conditions		
Storage Temp	-55°C to +125°C	
Option Codes		
Supply Voltage	Option Code	
+5.0V DC	0	
+3.3V DC	3	
Enable/Disable	Y=1	N=0
Symmetry	H=45:55	N=40:60

Electrical Characteristics Ta = +25°C, ^{Note1} Inclusive of VDD ±10%, Load Change ±10%, Ageing, Shock & Vibration					
Parameter	Condition	Frequency Range (MHz)	V _{DD} = +5.0V	V _{DD} = +3.3V	
Input Current	I _{DD}	All Conditions (See Note)	0.50 to 23.999	20mA Max.	15mA Max.
			24.00 to 49.999	30mA Max.	20mA Max.
			50.00 to 69.999	40mA Max.	30mA Max.
			70.00 to 150.00	60mA Max.	45mA Max.
Frequency Stability	Δf	0.50 to 150.00	See Options Above		
Symmetry	Sym	@50% V _{DD} Level	0.50 to 150.00	40/60% (with 45/55% Option)	
Output Voltage	V _{OL}	"0" Level	0.50 to 150.00	10% V _{DD} Max.	
	V _{OH}	"1" Level		90% V _{DD} Min.	
Rise Time	T _R	10% to 90% V _{DD}	0.50 to 150.00	10nS Max.	8nS Max.
Fall Time	T _F	90% to 10% V _{DD}	0.50 to 150.00	10nS Max.	8nS Max.
Start Up Time	T _S	0V to V _{DD}	0.50 to 150.00	10mS Max.	
Load	TTL Load	HCMOS Load	0.50 to 150.00	1-10 TTL	1-10 TTL
			0.50 to 49.999	50pF	30pF
			50.00 to 69.999	30pF	15pF
			70.00 to 150.00	15pF	15pF

Dimensions (mm)

Marking & Specification Code Example

Type	Tristate	V	Stability	OTR	Symmetry	Frequency	Date-Code (wwyy)
97	1	3	C	S	N	20.000	1611
14-Pin	Enable/Disable	+3.3V	±100PPM	0°C to +70°C	60/40%	20.000MHz	Week 16 2011

AEL Spec. Code = 9713 CSN 20.000MHz

Reflow Solder Profile (240°C)

Pin Connections

Pin #	Connection	Enable/Disable Function	
#1	E/D	Pin 1 Input	Pin 8 Output
#7	Ground	Open	Enable O/P
#8	Output	V _{IH} ≥ 2.0V DC	Enable O/P
#14	V _{CC}	V _{IH} < 0.8V DC	Disable O/P