3x2mm SMD Clock Oscillator (With Tri-State E/D Function)
Hcmos compatible O/P
AEL 301-Series 1.54MHz to 80.00 MHz

RoHS compliant 2002/95/EC

Operating Conditions

Frequency Stability Options		Frequency Stability (PPM)					
		±15	±20	±25	±30	±50	±100
Standard	-0°C to +70°C	N/A	N/A	AS	N/A	BS	CS
Industrial	-30°C to +85°C	N/A	N/A	AI	N/A	BI	CI

Storage Temp	-55°C to +125°C

Option Codes

Variable	Option Code	
+5.0V DC	0	
+3.3V DC	3	
+2.5V DC	2	
+1.8V DC	18	
Symmetry	H=45:55	N=40:60

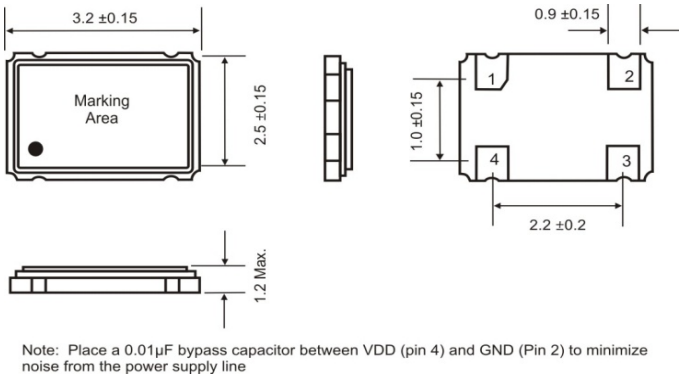
Marking & Specification Code Format

Type	Voltage Code	OTR/Stability	Symm	Frequency	WWYY
301	See right panel	See above	H or N	ie 20.000	1608

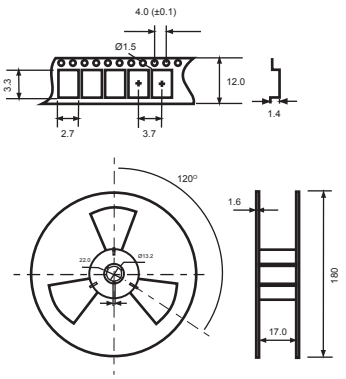
Electrical Characteristics Ta = +25°C, [Note] Inclusive of VDD ±10%, Load Change ±10%, Ageing, Shock & Vibration

Parameter	Condition	V_{DD} = +5.0V	V_{DD} = +3.3V	V_{DD} = +2.5V	V_{DD} = +1.8V
Input Current	1.54 to 9.999	15mA Max	8mA Max.	7mA Max.	6mA Max.
	10.0 to 34.999	20mA Max.	10mA Max.	8mA Max.	7mA Max.
	35.00 to 49.999	35mA Max.	25mA max.	20mA Max.	15mA Max.
	50.00 to 80.000	40mA Max.	35mA Max.	30mA Max.	25mA Max.
Frequency Stability	All Conditions (See Note)	See Options Above			
Symmetry	@50% VDD Level	40/60% (45/55% Available)			
Output Voltage	"0" Level	10% V_{DD} Max.			
	"1" Level	90% V_{DD} Min.			
Rise Time	10% to 90% V_{DD}	5nS Max.	7nS Max.	6nS Max.	5nS Max.
Fall Time	90% to 10% V_{DD}	5nS Max.	7nS Max.	6nS Max.	5nS Max.
Start Up Time	0V to V_{DD}	10mS Max.			
Output Load	HCMOS Load	15pF Max.			

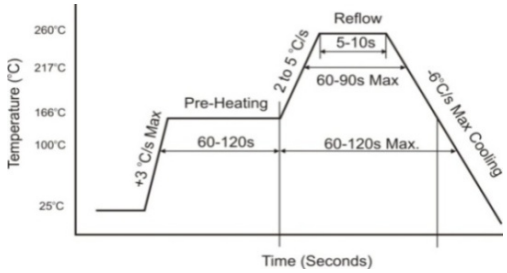
Dimensions (mm) — 3000pcs/Reel



Note: Place a 0.01µF bypass capacitor between VDD (pin 4) and GND (Pin 2) to minimize noise from the power supply line



Reflow Solder Profile (260°C)



Pin Connections

Pin	Connection	Enable/Disable Function	
#1	Tri-State/N.C	Pin 1 Input	Pin 8 Output
#2	Ground	Open	Enable O/P
#3	Output	VIH ≥ 2.2V DC	Enable O/P
#4	+V DC		

Static sensitive device