

Operating Conditions

Frequency Stability Options		Frequency Stability (PPM)					
Available Temp. Range Options		±15	±20	±25	±30	±50	±100
Standard	-10°C to +70°C	ES	DS	AS	FS	BS	CS
Industrial	-40°C to +85°C	EI	DI	AI	FI	BI	CI

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

Supply Voltage	Option Code
+5.0V DC	0
+3.3V DC	3
+2.8V DC	2
+1.8V DC	18
Symmetry	H=45:55 N=60:40

Marking & Specification Code Format

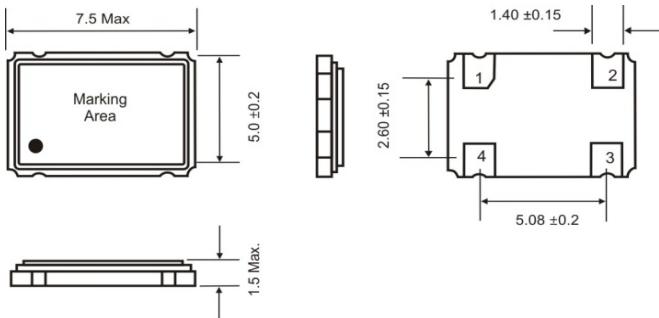
Type	Voltage Code	Stability	OTR	Symmetry	Frequency	WWYY
431	0/3/2/18	See Above	S or I	N or H	20.000	1608

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

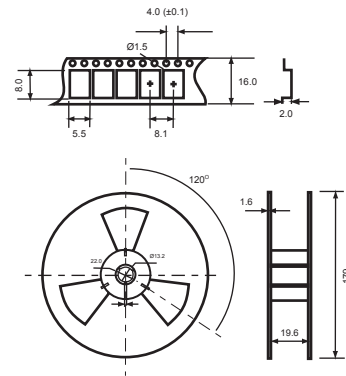
Parameter	Condition	V _{DD} = +5.0V	V _{DD} = +3.3V	V _{DD} = +2.8V	V _{DD} = +1.8V
Input Current	1.00 to 23.999	20mA Max	15mA Max.	12mA Max.	10mA Max.
	24.00 to 48.999	30mA Max.	20mA Max.	15mA Max.	12mA Max.
	50.00 to 69.999	40mA Max.	30mA Max.	20mA Max.	15mA Max.
	70.00 to 125.000	60mA Max.	45mA Max.	30mA Max.	25mA Max.
Frequency Stability	All Conditions ^(See Note)	See Options Above			
Symmetry	@50% V _{DD} 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.	8nS Max.	6nS Max.	7nS Max.
Fall Time	90% to 10% V _{DD}	5nS Max.	8nS Max.	6nS Max.	7nS Max.
Start Up Time	0V to V _{DD}	10mS Max.			
Output Load	HCMOS Load	15pF Max.			

Dimensions (mm)

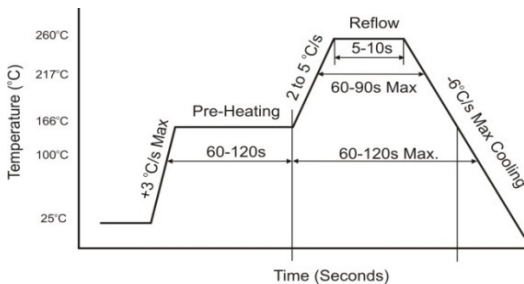
1000pcs/Reel



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	V _{IH} ≥ 2.2V DC	Enable O/P
#4	+V DC		

Static sensitive device