

SERIES CO425



- **FEATURES**
 - **ULTRA SMALL PACKAGE**
 - **EXCELLENT FOR HIGH DENSITY PACKAGING**
 - **STANBY CURRENT**

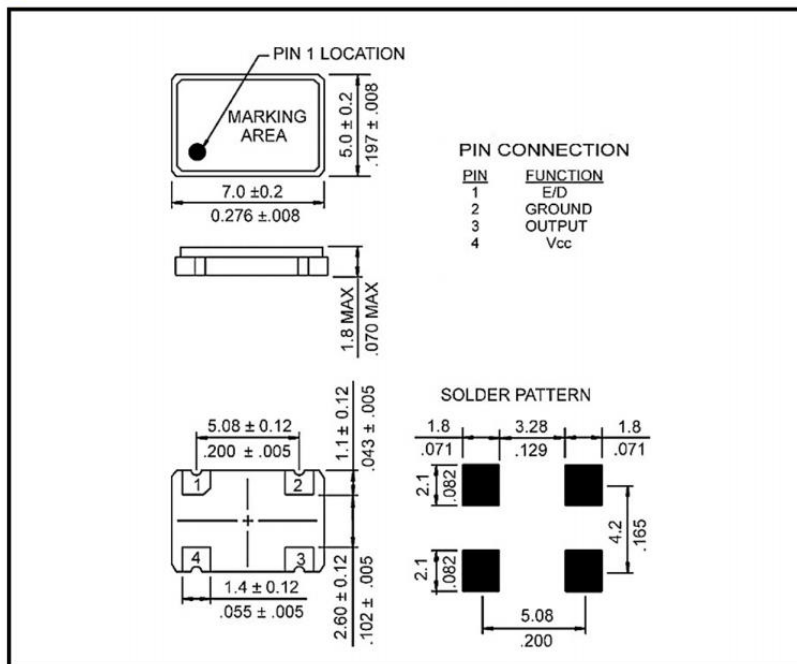
● **ELECTRICAL SPECIFICATION**

PARAMETER		VALUE
Frequency Range		1.544 ~ 125.000 MHz
Operating Temperature Range		-10°C ~ +70°C Standard -40°C ~ +85°C Extended
Frequency Stability		±20ppm*, ±25 ppm*, ±50 ppm, ±100ppm
Storage Temperature Range		-55°C ~ +125°C
Supply Voltage (Vcc)		2.5 V ±5%
Supply Current	@ 1.544 ~ 25.000 MHz	3 mA max
	@ 25.001 ~ 40.000 MHz	4 mA max
	@ 40.001 ~ 70.000 MHz	10 mA max
Load		15 pF CMOS max
Output	Symmetry	Normal Tight
	Level	Logic "0": 0.18 VDC max Logic "1": 1.62 VDC max
	Rise/Fall Time (20% ~ 80 %)	1.544 MHz ~ 35.000 MHz: 6 ns max (20% ~ 80%, CMOS Load) 35.001 MHz ~ 70.000 MHz: 3 ns max (0.4V ~ 2.4V, TTL Load)
Enable / Disable Function		Pin 1: High (+1.62 VDC min) PIN 3: Enabled Pin 1: Low (+0.18 VDC max) PIN 3: Disabled (High Impedance)
Standby Current		1.544 MHz ~ 35.000 MHz: 100µA max 35.001 MHz ~ 70.000 MHz: 10µA max
Start-Up Time		10 ms max

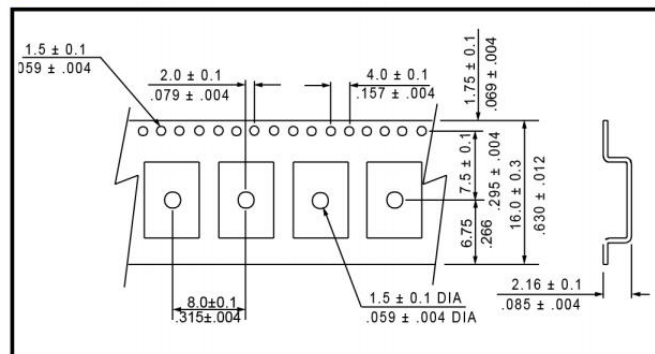
INCLUSIVE OF 25°C TOLERANCE, OPERATING TEMPERATURE RANGE, VOLTAGE OR LOAD CHANGES, AGING, SHOCK AND VIBRATION
*CONSULT RALTRON FOR SPECIFICATIONS

SERIES CO425

● OUTLINE DRAWING



● CARRIER TAPE DIMENSIONS



● PACKAGING

254 mm REEL DIAMETER, 16mm TAPE WIDTH, 8mm PITCH
QUANTITY: 1000 PIECES PER REEL

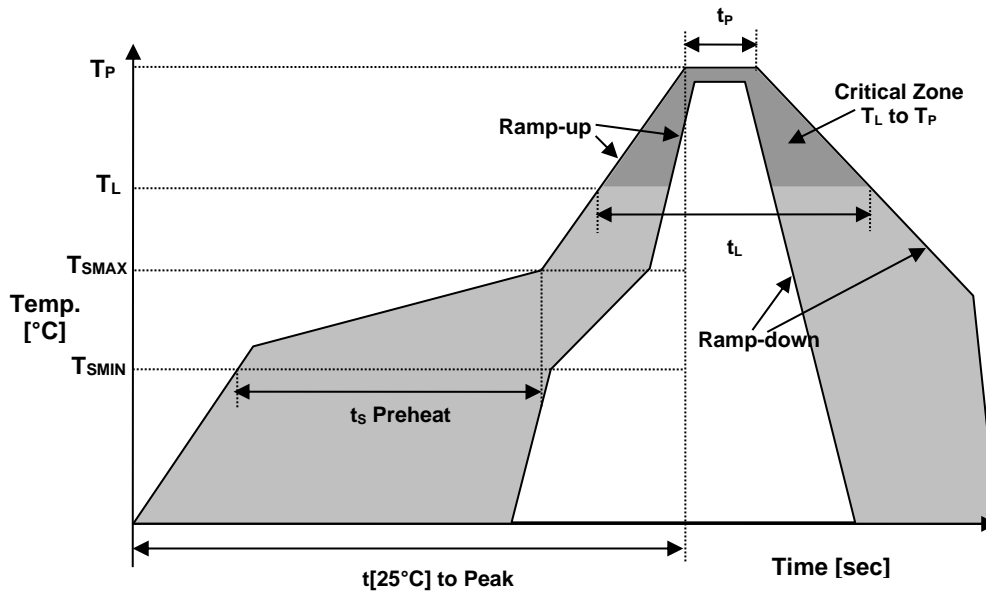
● PART NUMBERING SYSTEM

SERIES	FREQUENCY STABILITY	FREQUENCY	TEMPERATURE RANGE (°C)	SYMMETRY	TAPE & REEL
CO425	10 ±100 ppm	IN MHz	blank: -10°C to +70°C X: -40°C to +85°C	blank: 40 to 60% T: 45 to 55%	TR
	05 ±50 ppm				
	025 ±25 ppm				
	020 ±20 ppm				

EXAMPLE: CO42510-32.000-TR

Surface Mount CO425 CMOS Oscillator, 7.0 x 5.0 mm, 32.000 MHz, 2.5 VDC Supply Voltage, ±100 ppm Stability, 10°C to +70°C, Symmetry 45% to 55%, Tape and Reel packaging.

● **REFLOW PROFILE**



Reflow profile		
Temperature Min Preheat	T_{SMIN}	150°C
Temperature Max Preheat	T_{SMAX}	200°C
Time (T_{SMIN} to T_{SMAX})	t_s	60-180 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	260°C
Ramp-up rate	R_{UP}	3°C/sec max.
Ramp-down rate	R_{DOWN}	6°C/sec max.
Time within 5°C of Peak Temperature	t_p	10 sec.
Time $t[25^\circ\text{C}]$ to Peak Temperature	$t[25^\circ\text{C}]$ to Peak	480 sec.
Time	t_L	60-150 sec.

● **ENVIRONMENTAL**

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
REACH SVHC	COMPLIANT
RoHS	COMPLIANT
TERMINATION FINISH	Au

