



The ECS-CTE Series miniature SMD ceramic resonator includes built in capacitors for reduced component count. The SMD Ceramic resonator is a low cost frequency control solution when absolute frequency accuracy is not important.

[Request a Sample](#)


- 3.2 x 1.3 mm package
- Industry Standard footprint
- Extended Temp. Range
- Built-in Caps

#### DIMENSIONS (mm)

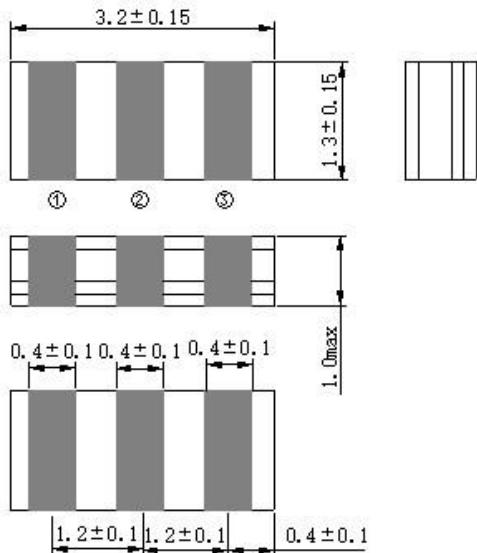


Figure 1) Top, Side, and Bottom views

#### PART NUMBERING GUIDE: Example ECS-CTE-10.00-15-TR

ECS -CTE	FREQUENCY	Built In CAPACITANCE	PACKAGING
	10.00 = 10.000 MHz *See Developed Frequencies Pg. 2	Standard 15 = 15 pF 10 = 10 pF 22 = 22 pF 30 = 30 pF 33 = 33 pF	TR = Tape & Reel 3K/Reel

\*Contact ECS for availability of non-developed frequencies/non standard cap values.

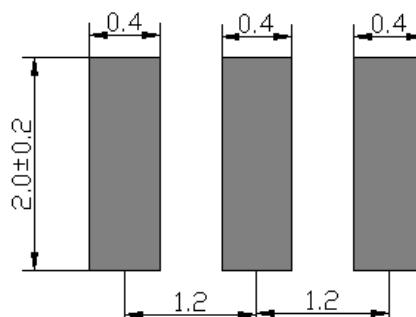
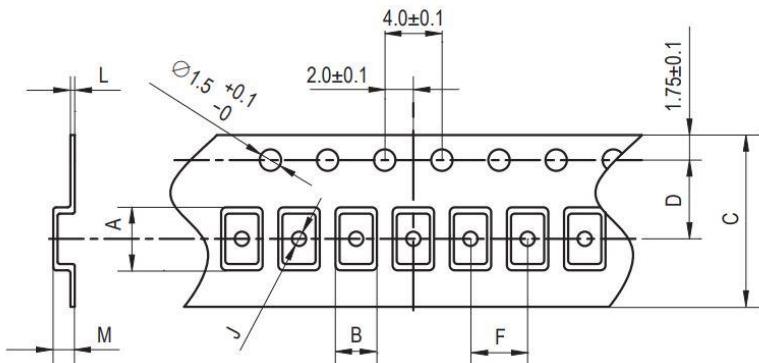


Figure 2) Suggested Land Pattern

**POCKET TAPE DIMENSIONS (mm)**



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
3.4	1.5	8.0	3.5	4.0	1.1	0.25	1.3	180	3000

**SOLDER PROFILE**

Peak solder Temp +260°C Max 10 sec Max.

2 Cycles Max.

MSL 1, Lead Finish Sn/Ag

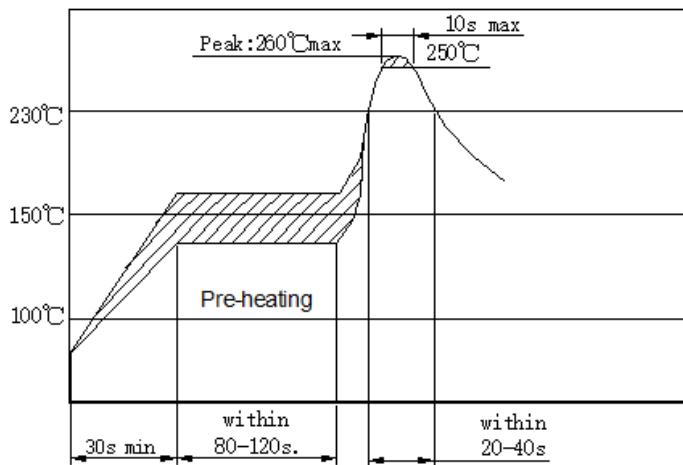
**DEVELOPED FREQUENCIES**

8.00 MHz

10.00 MHz

12.00MHz

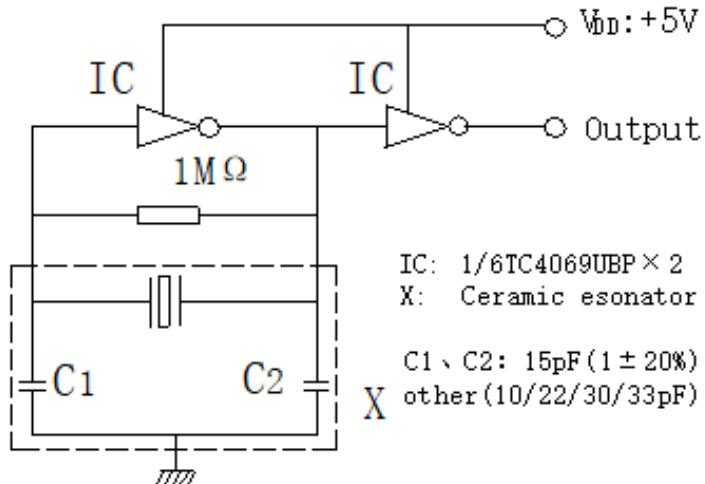
16.00MHz



**Figure3)** Suggested Reflow Profile



# ECS-CTE SMD Ceramic Resonator



#### **Figure4) Test Circuit**

*Note: ECS does not approve the use of its products in Automotive, Military, Avionics, Life Sustaining or Life Support systems or any other related medical applications without written approval from ECS Inc.*