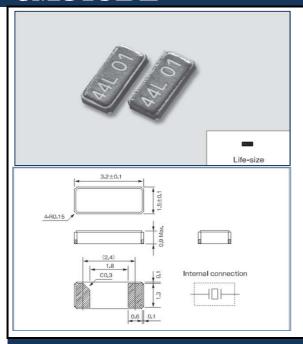
## CM315DL



## TUNING FORK CRYSTAL UNIT

- Tuning fork crystal with ceranic packaged SMD type for low current consumption IC.
- Reduced motional resistance by 30% compared with exsisting model.
- Most appropriate for portable devices, mobile telecommunication devices and wearable devices.

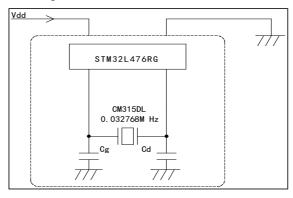
Standard Specificatione				
Nominal Frequency	kHz	32.768		
Load Capacitance/CL	pF	6/7/9/12.5		
Frequency Tolerance	ppm	+/-20		
Operatating Temperature Range	$^{\circ}$ C	-40 to +85		
Storage Temperature Range	$^{\circ}$ C	-55 to +125		
Motional Resistance	Ω	50k Max		
Level of drive	uW	1 uW max.		
Insulation Resistance	ΜΩ	500 Min. (at DC100+/-15V)		

## **Investigation Report of Oscillation Circuit**

\*USB/at 25°℃

I C		ST MICRO / STM32L476RG	
		(PWB:NVCLEO-F476RG)	
CRYSTAL		CM315DL	
Nominal Frequency	kHz	32.768	
Laod Capacitance	pF	6	
Cg,Cd	pF	10	10
Negative Resistance (-R)	ohm	1450K	
Drive Level	μW	0.1	

st Our Recommendable Negative Resistance Value : over 300k ohm



**\*Matching is ONLY for reference.** 

It is related to the current board configuration and any changes on the boards and crystal spec is under customer's responsibility.

CITIZEN FINEDEVICE CO., LTD. /MIYOTA PLANT
Crystal Devices Division