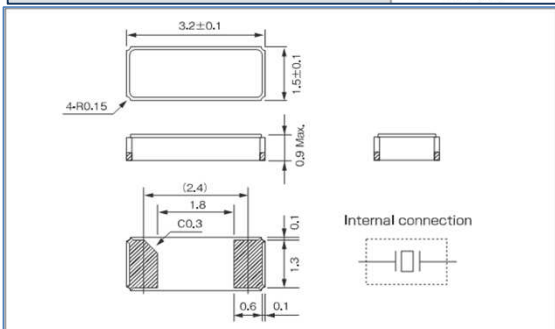


CM315DL



TUNING FORK CRYSTAL UNIT

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

Standard Specification

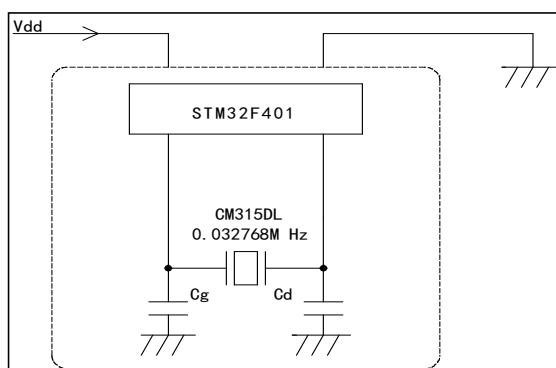
Nominal Frequency	kHz	32.768
Load Capacitance/CL	pF	6/7/9/12.5
Frequency Tolerance	ppm	+/-20
Operatating Temperature Range	°C	-40 to +85
Storage Temperature Range	°C	-55 to +125
Motional Resistance	Ω	50k Max
Level of drive	uW	1 uW max.
Insulation Resistance	MΩ	500 Min. (at DC100+/-15V)

Investigation Report of Oscillation Circuit

*USB/at 25°C

I C		ST MICRO / STM32F401 (PWB:NVCLEO-F401RE)	
CRYSTAL		CM315DL	
Nominal Frequency	kHz	32.768	
Laod Capacitance	pF	6	
Cg,Cd	pF	8	8
Negative Resistance (-R)	ohm	400K	
Drive Level	μW	0.1	

* 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

4107-5 Miyota Miyota-machi Kitasaku-gun
Nagano 3890295 Japan
TEL) +81-267-31-1111
<http://cfd.citizen.co.jp/index.html>