# **R**TOKO

# CRHD

0.3

Unit: mm

#### CERAMIC RESONATORS

10 Max.

S

10

5

0.6

#### Description

- Ceramic resonators in the MHz band for microprocessors.
- Applicable oscillating frequency range: 16.93MHz, 33.86MHz.

#### Features

- Precise oscillating frequency without adjustment.
- May be used with a variety of ICs.
- Lead-free terminations

#### Applications

- Reference signal oscillators for—Microcomputers (CD/MD players, CD-ROM, CD-R, etc.)
- Digital applications equipment including measuring instruments, communications equipment, toys, etc.

### Test Circuit



## STANDARD RESONATORS SELECTION GUIDE

#### TYPE CRHD (CERASONATOR®) MHz Band Resonators

TOKO	Oscillating	Resonance	Fosc	External	Capacitor	
Part	Frequency (Fosc)	Impedance	Temp. Stability	C <sub>1</sub>	C <sub>2</sub>	
Number*	(MHz)	(Ω)	(-20°C ~ +80°C)	(pF)	(pF)	
DCRHD16.93	16.93±0.5%	40 max.	±0.3%	30	30	
DCRHD33.86	33.86±0.5%	40 max.	±0.3%	5	5	

**Dimensions** 

• Oscillating frequency tolerance can be designed narrower than Fosc±0.5%, but Fosc±0.2%.

• TOKO performs matching evaluations for all types of ICs. Please contact TOKO regarding applicable products.

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