

SMD Version - 3.7 x 3.1 x 1.2

Features

Low cost & wide applications

Industrial standard

RoHS compliant

# • General Specification

Tumo	CRACV/ MT	CRACV/ MT CRACV/ MX		CRTCV / MX	
Туре	2pins, no built-in capacitor		3pins, with built-in capacitor		
Frequency Range	8.00 to 13.00MHz	13.01 to 33.86MHz	8.00 to 13.00MHz	13.01 to 33.86MHz	
Frequency Stability at 25°C	0.5	0%	<u>+0.5%</u>		
requency Stability vs emperature Range <u>+0.4%</u>		<u>+</u> 0.3%	<u>+</u> 0.4%	<u>+</u> 0.3%	
Operating Temperature Range	-20°C to +80°C		-20°C to +80°C		
Storage Temperature Range	-35°C to +85°C		-35 °C to +85 °C		
Series Resistance ESR	es Resistance ESR 25Ω		25Ω	40Ω	
Operating Voltage	5V		5V		
Aging for 10 years	<u>+0.3%</u>		<u>+0.3%</u>		
Built-in Capacitor (C1, C2)	No		Yes		

# • Holder and Type Codes

CR = Ceramic Resonator	A = 2pins, no built-in capacitor	T = 3 pins, with built-in capacitor

# • Lead Type Code

CV = SMD, 3.7 x 3.1 x 1.2

• Vibration Mode Codes

G = Thickness Shear	T = Thickness Expander	X = Thickness Expander (3rd OT)
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# • Frequency Stability vs Temperature Codes

$1 = \pm 0.1\%$	$2 = \pm 0.2\%$	$3 = \pm 0.3\%$	$5 = \pm 0.5\%$

# • Loading Capacitance Codes (pF)

1 = 5	2 = 6	3 = 15	4 = 22
5 = 30	6 = 47	8 = 100	

# Ceramic Resonator - CRACV and CRTCV

#### Marking

Frequency + M (MHz)

#### Ordering Information

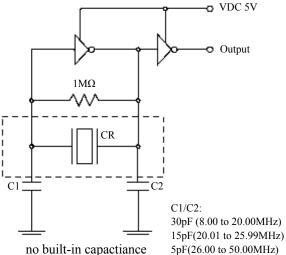
Holder	Туре	Lead Type	Frequency	Vibration Mode	Frequency Stability vs Temp	Load Capacitance	Packing
			(MHz)			(pF)	
See Tables xx.xxxM			xx.xxxM	See Tables			TR=tape & reel
	A=2pins, no built-in				<u>+</u> 0.3%	30	
CR	Α	CV		Т	3	5	TR

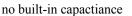
For Example:

CRACV8.000MT35/TR

### Test Circuit

#### 1. CRACV





#### Dimensions

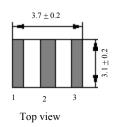


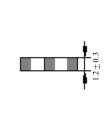


Top view

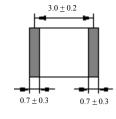
Side view



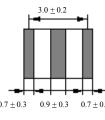




Side view



Bottom view

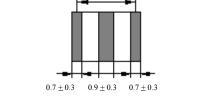


Bottom view

Pad layout

1.5 ± 0.2

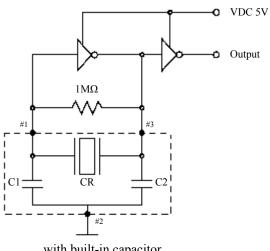
in mm



NEWXTAL - New Crystal

Website: www.newxtal.com

2. CRTCV



with built-in capacitor

0.7 <u>+</u> 0.3

3.0 <u>+</u> 0.2

Pad layout

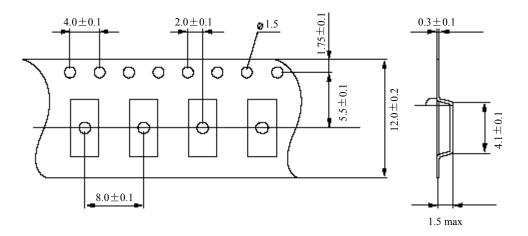
+0.2

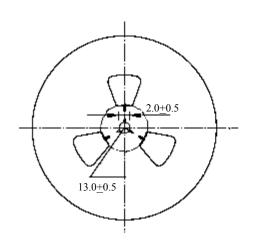
 $0.7 \pm 0.3$ 

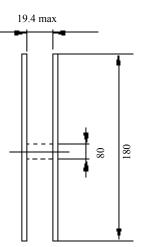
Email: sales@newxtal.com

# Ceramic Resonator - CRACV and CRTCV

# • Tape & Reel Specification







\* Reel Quantity: 1,000pcs

in mm

### • Reflow Soldering Profile

