

Ceramic Resonators

CRB

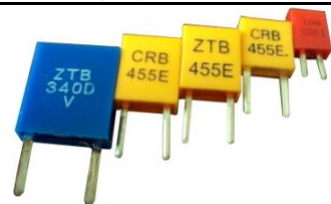
ZTB

Features

◆RoHS Compliant

◆Different package sizes

◆Wide frequency range



Electrical Specifications

Item	Specifications					
Type	CRB				ZTB	
Center Frequency Range	190 to 374KHz	375 to 429KHz	430 to 509KHz	510 to 699KHz	700 to 999KHz	1000 to 1250KHz
Series Resistance Max.	20Ω	20Ω	20Ω	30Ω	70Ω	100Ω
Frequency Stability	±1.0KHz	±1.0KHz	±2.0KHz	±2.0KHz	±0.5KHz	±0.5KHz
Stability vs. Temperature	±0.3%					
Operating Temperature	-20℃ to +80℃ typical, -40℃ to +85℃ available					
Storage Temperature	-30℃ to +85℃ typical, -50℃ to +105℃ available					
Aging Over 10 Years	±0.3% Max.					

Ordering Information

C	R	Type	XXX XXXX	K	Material Color	Freq. Stability at 25℃	Operating Temp.	Stability Vs.Temp.	Option
C: Ceramic R: Resonator	C: CRB Z: ZTB	Center frequency 190 to 1250KHz	K: KHz	Y: Yellow B: Blue	1: ±1.0KHz 2: ±2.0KHz 3: ±0.5KHz	C: -20 to +80℃ D: -40 to +85℃	3: ±0.3% 5: ±0.5%	F: Lead Free T: T&R Blank: Bulk	
Example: CRC455KY2C3 (Ceramic, CRB, 455KHz±2.0KHz, Yellow material, +/-0.3%, -20 to +80deg.)									

Dimensions CRB / ZTB

The diagram shows two views of a rectangular resonator package. The top view shows dimensions A (width), B (height), D (distance from left edge to mounting hole center), E (distance from right edge to mounting hole center), F (mounting hole diameter), and G (distance between mounting hole centers). The side view shows dimension C (thickness) and H (height of the mounting tab). A note indicates H = 0.2±0.05.

	A	B	C	D	E	F	G
190.0 ~ 249.0 kHz	13.5	14.7	3.8	8.0	10.0	1.2 max.	0.80
250.0 ~ 374.0 kHz	11.0	12.2	3.8	7.0	7.7	1.2 max.	0.80
375.0 ~ 400.0 kHz	7.9	9.3	3.6	7.0	5.0	1.0 max.	0.65
401.0 ~ 699.0 kHz	7.0	9.0	3.5	5.5	5.0	0.8 max.	0.50
700.0 ~ 1250.0 kHz	5.2	6.8	2.8	3.5	2.5	0.8 max.	0.50

Unit:mm
500pcs per pag

Test Circuit CRB / ZTB (Without built-in capacitors)

	VDC:	3.3V or 5.0V
	R:	1 MOhm
	C1/C2:	330 / 470 pF (190 ~ 249 kHz)
		220 / 470 pF (250 ~ 374 kHz)
		120 / 470 pF (375 ~ 400 kHz)
		100 / 100 pF (401 ~ 1250 kHz)

