

# TCXO

## 10~60MHz 5.2X3.4mm, Ceramic Package, With Side Pad, Industrial Temperature TCXO

### Quick Detail:

- Aluminum housing
- -0.5/6V VDD options
- -40°C~85°C operating temperature
- Small package
- High precision
- Low phase noise
- Optional three-state control function
- Anti-overload > 30000g
- CE, RoHS, REACH compliant
- 1 Year Warranty

### Description:

The LT-CR-BT0503E is the newest addition to ZR's line of TCXOs. The standard part offers an ultra-tight stability of  $\pm 2.5\text{ppm}$  to  $\pm 3.5\text{ppm}$  over -40°C to +85°C across a supply voltage range of -0.5V /6V. The bt0503e uses a high refresh rate, or frequency calibration rate, to maintain a linear frequency output during temperature compensation. The 5.2 mm x 3.4 mm x 2.0 mm ceramic package and options for 1,000- or 3,000-piece reels make these components ideal for satellite communication, military communication equipment, base station, test and measurement equipment.

### Specifications:

#### Electrical / Optical Characteristics (Ta=25°C±3°C)

Items	specification	Condition
Part Number	LT-CR-BT0503E	
Frequency Range	10MHz~60MHz	
Operating Voltage(VDD)	-0.5/6V	
Operating Temperature	-40°C~+85°C	
Freq. Stability Vs. Temp.	$\pm 0.2\text{ppm} \sim \pm 1.5\text{ppm}$	-20°C~+70°C
	$\pm 0.28\text{ppm} \sim \pm 1.5\text{ppm}$	-40°C~+85°C
	$\pm 1.0\text{ppm} \sim \pm 2.5\text{ppm}$	-50°C~+90°C

	$\pm 2.5\text{ppm} \sim \pm 3.5\text{ppm}$	$-55^{\circ}\text{C} \sim +95^{\circ}\text{C}$
Frequency Tolerance	$\pm 0.5\text{ppm} \sim \pm 1.5\text{ppm}$	At shipment, nominal EFC, $+25^{\circ}\text{C}$
Output Waveform	LVC MOS, Clipped Sine Wave	
Voltage-controlled voltage	$1.5\text{V} \pm 1.0\text{V}$	
Absolute Pull Range		
Phase Noise	$< -140\text{dBc}@10\text{MHz}$	
	$< -135\text{dBc}@10\text{MHz}@12.8\text{MHz} \sim 20\text{MHz}$	
	$< -130\text{dBc}@10\text{MHz}@12.8\text{MHz} \sim 20\text{MHz}$ $@20.48\text{MHz} \sim 38.4\text{MHz}$	
	$< -125\text{dBc}@10\text{MHz}@12.8\text{MHz} \sim 20\text{MHz}$ $@20.48\text{MHz} \sim 38.4\text{MHz} @ \geq 40\text{MHz}$	
Overload Resistance		
Dimension	$5.2 \times 3.4 \times 2.0\text{mm}$	

**Outline Drawing (Unit: mm):**

