Ceramic Resonator

DIP type, ZTB500F/503F series

ZTB456F Series

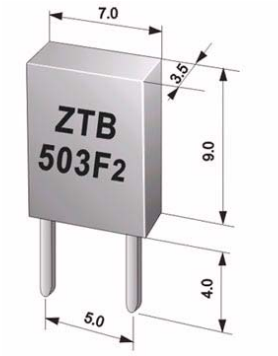
& Feature:

ZTB503/500F Series of Ceramic Resonator For TV Horizontal Synthesizer Circuits

& Electrical Specifications

Part Number	Frequency Accuracy	Applicable IC
ZTB503F2	503.5±2kHz	μPC1401(NEC)
ZTB503F5	504.5±2kHz	LA7620(SANYO)
ZTB503F6	519±2kHz	M51307(MITSUBISHI)
ZTB503F10	15.734kHz±0.5%	TA7777P(TOSHIBA)
ZTB503F12	503.5kHz±2kHz	TDA3586(THOMSON)
ZTB503F15	505.1kHz±2kHz	LA7650(SANYO)
ZTB503F30	503.5kHz±1.5kHz	TA8654AN(TOSHIBA)
ZTB503F38	15.734kHz±62kHz	AN5302(MATSUSHITA)
ZTB500F2	500.0Hz±2kHz	μPC1401(NEC)
ZTB500F9	500.0Hz±2kHz	M51308SP(MITSUBISH)
ZTB500F13	500.0Hz±2kHz	M51367SP(MITSUBISH)
ZTB500F28	15.680kHz±0.4%	LA7680(SANYO)
ZTB500F40	15.680kHz±0.4%	TA8691N(TOSHIBA)
ZTB500F55	15.680kHz±0.4%	LA7685(SANYO)

& Dimension:



&Physical and Environmental Characteristics

No	Item	Condition of Test	Performance Requirements
7.1	Humidity	Keep the resonator at 40 2℃ and 90-95% RH for 96 hours.Then release the resonator into the room condition for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
7.2	High Temperature Exposure	Subject the resonator to 80 5℃ for 96 hours.Then release the resonator into the room conditions for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
7.3	Low Temperature	Subject the resonator to -20 5℃ for 96 hours.Then release the resonator into the room conditions for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
7.4	Temperature Cycling	Subject the resonator to -20℃ for 30 min.followed by a high temperature of 80℃ for 30 min.Cycling shall be repeated 5 times with a transfer time of 15 min.at the room condition.Then release the resonator into the room temperature for 1 hour prior to the measurement.	It shall fulfill the specifications in Table 1.
7.5	Vibration	Subject the resonator to vibration for 2 hours each in x.y and z axis with teh amplitude of 1.5mm,the frequency shall be varied uniformly between teh limits of 10--5Hz	It shall fulfill the specifications in Table 1.
7.6	Mechanical Shock	Drop the resonator randomly onto a concrete floor from the height of 70cm 3 times	It shall fulfill the specifications in Table 1.
7.7	Resistance to Solder Heat	Dip the resonator terminals no closer than 2 mm into the solder bath at 260 10℃ for 3 0.5 sec.	It shall fulfill the specifications in Table 1.
7.8	Solderability	Dip the resonator terminals no closer than 2 mm into the solder bath at 235 5℃ for 3 0.5 sec.	More than 95% of the terminal surface of the resonator shall be covered with fresh solder.
7.9	Lead Fatigue (1)Pulling Test	Weight along with the direction of terminals without any shock 1kg for 10 sec.	The resonator shall show no evidence of damage and shall fulfill all the initial electric characteristics.
	(2)Bending Test	Lead shall be subject to withstand against 90 degree bending at its stem.This operation shall be done towards both direction.	