

ZTB456F Series

& Feature:

ZTB456F Series of Ceramic Resonator for FM Multiplexers

& Electrical Specifications

Part Number	Frequency Accuracy	Applicable IC
ZTB456F11	19.000kHz * 38Hz	LA3430 (SANYO)
ZTB456F14	19.000kHz * 38Hz	TA7413AP (TOSHIBA)
ZTB456F15	456kHz‡2Hz	LA1832 (SANYO)
ZTB456F16	19.000kHz * 38Hz	TA8122AN (TOSHIBA)
ZTB456F18	19.000kHz * 38Hz	TA8132N (TOSHIBA)
ZTB456F33	456kHz‡2Hz	LA2232 (SANYO)

& Dimension:



&Physical and Environmental Characteristics

No	Item	Condition of Test	Performance
			Requirements
7.1	Humidity	Keep the resonator at 40 2°C and 90-95% RH for 96 hours. Then	It shall fulfill the
		release the resonator into the room condition for 1 hour prior to the	specifications in Table
		measurement.	1.
7.2	High Temperature Exposure	Subject the resonator to 80 5° C for 96 hours. Then release the	It shall fulfill the
		resonator into the room conditions for 1 hour prior to the	specifications in Table
		measurement.	1.
7.3	Low Temperature	Subject the resonator to -20 5°C for 96 hours. Then release the	It shall fulfill the
		resonator into the room conditions for 1 hour prior to the	specifications in Table
		measurement.	1.

Ceramic Resonator

DIP type, ZTB456F series



7.4	Temperature Cycling	Subject the resonator to -20° C for 30 min.followed by a high temperature of 80°C 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 105Hz	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° C 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° C 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
	(2)Bending Test	Lead shall be subject to withstand against 90 degree bending at its stem. This operation shall be done towards both direction.	damage and shall fulfill all the initial electric characteristics.

Website : www.selectech.com.sg , www.selectech.cn Email : sales@selectech.com.sg , sales@selectech.cn