There is continuous, real-time, seismic monitoring at 11 from 29 active Kamchatka's volcanoes. In active volcanoes we can observe both volcanotectonic (VT) earthquakes and low-frequency (LF) seismic events. LF volcanic earthquakes are indicators of magma transportation and activity within shallow conduit systems. LF earthquakes appearance in seismic flow can be a precursor of coming volcanic eruption. In Kamchatka seismic monitoring survey, earthquakes processing is interactive digital signal analysis on PC screen. In the case of volcanic activation the number of earthquakes increases significantly. So signal processing and fast detection of LF earthquakes becomes difficult. Partially the problem solving is in automatic analysis of spectral amplitudes of seismic records. Dominant frequencies of LF earthquakes are between 2-3 Hz. VT earthquakes usually have high-frequency components in spectrum. We propose to use for analysis the dispersion of seismic signal in three frequency ranges: 1.5-3.0 Hz, 3.0-6.0 Hz and 6.0-12.0 Hz. For visualization of hidden correlation in waveform spectral characteristics we use the triangle diagram. In given report we present VT and LF earthquakes separation with the triangle diagram for three active volcanoes located in the Eastern Kamchatka volcanic belt: (1) Mutnovsky (continues intensive fumaroles and hydrothermal activity); (2) Koryaksky (2009-2010 activization, strong steam-gas and ash emission); (3) Kizimen (2010-2011 explosive eruption).