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Effect of electric field on dielectric parameters of silver doped chalcogenide glassy alloy D SHARMA, WIT, R K SHUKLA, HBTU, Kanpur India, A KUMAR, HBTU — The effect of electric field on dielectric constant and dielectric loss of SeInAg chalcogenide glassy alloys is reported here. It is found that the glassy alloy shows a dynamic behavior with real and imaginary part of dielectric constants. The real part of dielectric constant shows the presence of one plateau at lower frequency from 500 Hz to 5 kHz, but then the second plateau appears as frequency increases from 5 kHz to 500 kHz. The imaginary part shows one peak for lower frequencies but two peaks for higher frequencies with an indication of having potential increased storage capacity of the material at higher frequencies with two peaks. Keywords: Electric field, dielectric constant, dielectric loss, glassy alloy, Storage, memory device, frequency.

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