

Off-band characteristics of small isolator for portable phones

S. Takeda. "Off-band characteristics of small isolator for portable phones." 1999 MTT-S International Microwave Symposium Digest 99.3 (1999 Vol. III [MWSYM]): 1361-1364 vol.3.

The off-band attenuation characteristics of lumped element isolators for portable phones has been studied using the developed circuit simulator. The introduction of new parameters, circular-polarization occupation ratio ϕ and ferrite filling factors η_r , η_t along radius and thickness of garnet respectively, enabled us to realize the actual off-band characteristics by simulation. The second peak of attenuation near at $1.5f_0$ reflects the residual inductance L_d due to ϕ and η_r . It has become evident that the attenuation pole near at $2f_0$ corresponds to the ferromagnetic resonant frequency.

[!\[\]\(c3d993ca47bfe2a953c700506ce31fa0_img.jpg\) Return to main document.](#)