

BALUNS WITH INTEGRATED MATCHING NETWORKS

ABSTRACT OF THE DISCLOSURE

Baluns with integrated matching networks are provided herein. In certain embodiments, a balun structure includes a first pair of coupled lines, a second pair of coupled lines and a transmission line. Additionally, a first port of the balun is connected to a reference voltage by way of a first line of the first pair of coupled lines, the transmission line, and a first line of the second pair of coupled lines. Furthermore, a second port of the balun is connected to the reference voltage by way of a second line of the first pair of coupled lines, while a third port of the balun is connected to the reference voltage by way of a second line of the second pair of coupled lines. The first port serves as an unbalanced signal terminal, while the second port and the third port serve as positive and negative signal terminals.

FIG. 3A