

## The EMC Difference:

▶ Save money in volume production by replacing manually installed baluns with our surface mount baluns! Available in tape-and-reel packaging. Patent pending.

### APPLICATION:

The EMC balun replaces the coaxial cable or the printed circuit board (PCB), traditionally used to match push pull amplifiers. Push pull amplifiers use a pair of balanced/unbalanced transmission lines (baluns) to provide the proper 180° out of phase signal configuration that maximizes the output of the transistors (see Figure 1). Typically, either a length of coaxial cable or a piece of a PCB have been used as baluns. These parts are not suitable for automated pick-and-place manufacturing.

The EMC surface-mount balun, on the other hand, is specifically designed for high-speed, automated assembly. The device is available on tape-and-reel and comes with a plastic cap which provides a surface suitable for vacuum pick-up. By eliminating manual assembly and enabling the use of automated assembly equipment, the EMC surface-mount balun lowers the cost and improves the reliability of your circuit.

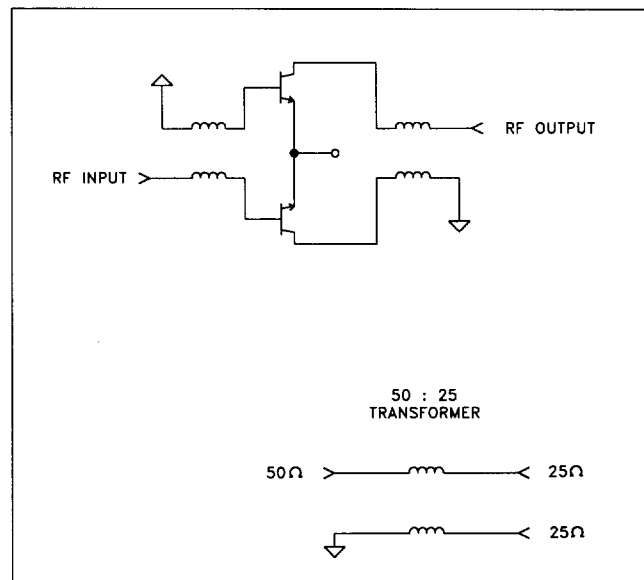
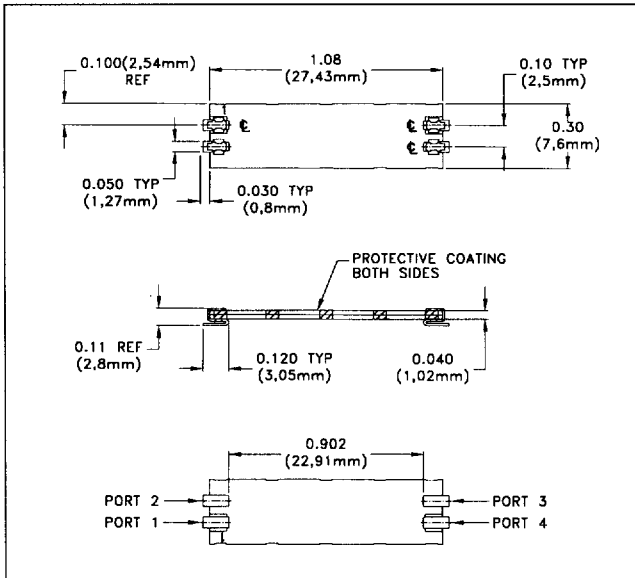
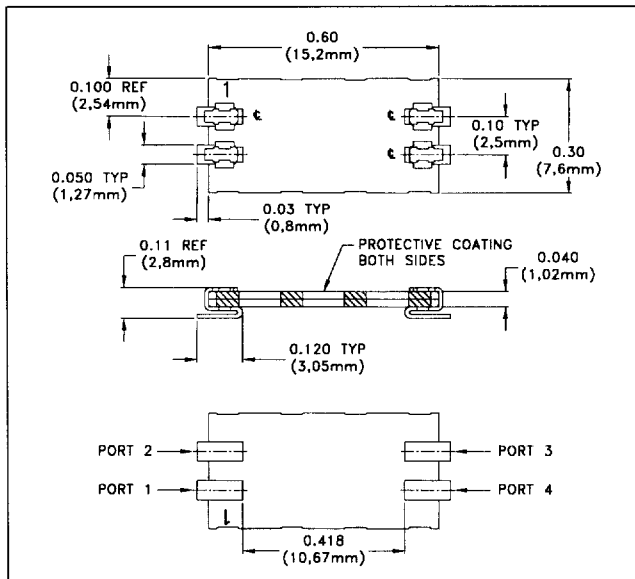


Figure 1



## MODEL B3-900-50-25

Frequency Range: 0.8 - 1.0 GHz  
 Input Power: 100 watts  
 Temperature Range: -55 °C to + 125 °C  
 VSWR: 1.30  
 Phase Balance: 180° ± 20°  
 Transformer Ratio: 1:1 (50Ω in, 25Ω out)  
 Insertion Loss: 0.3 dB maximum  
 Amplitude Balance: ± 0.5 dB



## MODEL B4-1900-50-25

Frequency Range: 1.8 - 2.0 GHz  
 Input Power: 100 watts  
 Temperature Range: -55 °C to +125 °C  
 VSWR: 1.30  
 Phase Balance: 180° ± 20°  
 Transformer Ratio: 1:1 (50Ω in, 25Ω out)  
 Insertion Loss: 0.2 dB maximum  
 Amplitude Balance: ± 0.5 dB

The EMC balun has been designed to be attached using 60/40 Sn/Pb solder at the temperatures found in normal soldering profiles for SMT assembly.