

## Description

Mi-Wave's 635 series Magic Tee consist of three mutually perpendicular flanged sections of a standard waveguide. Power applied to H plane port is divided between the two in-line ports of the main tee section to result in equal power, in-phase output signals. Power applied to E plane port is divided between the two in-line ports of the main tee section to result in equal power, opposite-phase output signals.

## Notes

Standard products meet full performance specifications over 80% of the waveguide band, with slightly degraded performance over the balance of the band.

S/N: N/A

## Electrical Specifications

|                              | Minimal | Typical | Maximum |
|------------------------------|---------|---------|---------|
| Frequency                    | 33 GHz  |         | 50 GHz  |
| Insertion Loss               |         | 0.7 dB  |         |
| Isolation E plane to H plane |         | 30 dB   |         |
| Isolation Collinear arms     |         | 20 dB   |         |
| VSWR, H plane                |         | 1.5:1   |         |
| VSWR, E plane                |         | 1.6:1   |         |
| Power Imbalance              |         | ±0.5 dB |         |
|                              |         |         |         |
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## Physical Specifications

|                        |                 |
|------------------------|-----------------|
| Input and Output Ports | WR-22 Waveguide |
| Flange                 | UG-383/U Flange |
| Material Type          | Aluminum        |
| Finish                 | Gold Plated     |
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