

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: NA

Electrical Specifications

| | Minimal | Typical | Maximum |
|--|---------|---------|---------|
| Frequency | 170 GHz | | 260 GHz |
| Insertion Loss (not including 3db power split) | | 4 dB | |
| Isolation E plane to H plane | | 20 dB | |
| Isolation Collinear arms | | 20 dB | |
| VSWR, H plane | | 1.6:1 | |
| VSWR, E plane | | 1.6:1 | |
| Power Imbalance | | ±1.5 dB | |
| Operating Temperature | -40°C | | +75°C |
| Storage Temperature | -50°C | | +85°C |
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Physical Specifications

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|------------------------|-------------------|
| Input and Output Ports | WR-04 Waveguide |
| Flange | UG-387/U-M Flange |
| Material | Brass / Aluminum |
| Finish | Gold Plating |
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Tested by: Kim Madden

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