PRODUCT DATASHEET

# TPS15E-350/6000

Broadband Tapper/Unequal Divider for Wireless & Indoor Application, Support 350-6000MHz with coupling value 15dB

## PRODUCT DESCRIPTION

RFS TPSE series Tapper/Unequal Divider have been designed for a variety of wireless applications in the frequency band from 350 to 6000MHz. The unit couples off a defined fraction of a RF signal from 5 to 30 dB with minimal reflections or loss. The broad frequency range is ideally suited for multi-band distributed antenna systems or in combination with RADIAFLEX® radiating cables.

## FEATURES / BENEFITS

- **Broadband 555MHz-6000MHz**
- N Female Interface
- PIM Optimized Design (160dBc @2x43dBm)
- Low Insertion Loss
- High Power Handling
- Small Size, Low Weight

# TECHNICAL FEATURES

## ELECTRICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Frequency Range** | MHz | 350-6000 |
| **Power Rating** | W | 300 |
| **Maximum Reflected Power** | W | 200 |
| **PIM 3rd @2*43 dBm** | dBc | 160 |
| **Input Impedance** | Ohm | 50 |

## MECHANICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Connectors** | | N Female |
| **Dimensions, L*W*H** | mm(in) | 143.5*46*25<br>(5.65*1.81*0.98) |
| **Net Weight ±10%** | kg (lb) | 0.25(0.55) |
| **Temperature Range** | °C | -25 to +65 (+160 for 2hours in an event of fire, encased in DragonSkin Cabinet) |
| **IP Level** | | IP66 |
| **RoHS** | | Compliant |



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# TPS15E-350/6000

Broadband Tapper/Unequal Divider for Wireless & Indoor Application, Support 350-6000MHz with coupling value 15dB

## MODEL NUMBER SPECIFICATIONS

| Model Number | | TPS3E-350/6000 | TPS5E-350/6000 | TPS6E-350/6000 | TPS8E-350/6000 |
|---|---|---|---|---|---|
| VSWR | | 1.25:1@0.698-0.96&1.695-2.7GHz 1.35:1@0.35-0.698&3.5-4.5&4.9-6GHz | 1.25:1@0.35-0.96&1.695-2.7GHz 1.3:1@3.5-4.5&4.9-6GHz | 1.25:1@0.35-0.96&1.695-2.7GHz 1.3:1@3.5-4.5&4.9-6GHz | 1.2:1@0.35-0.96&1.695-2.7GHz 1.3:1@3.5-4.5&4.9-6GHz |
| Coupling Loss | dB | 3.0 | 5.0 | 6.0 | 8.0 |
| Coupling Tolerance | dB | 4.8dB +0/-1.5dB@0.35-0.38GHz 4.8dB +0/-1.3dB@0.38-0.698GHz 4.8dB +0/-0.8dB@0.698-0.96GHz 4.8dB ±0.8dB@1.695-2.7GHz 4.8dB +0/-1.9dB@3.5-4.5GHz 4.8dB +0.1/-1dB@4.9-6GHz | 6dB +0/-1.3dB@0.35-0.38GHz 6dB +0.2/-1.1dB@0.38-0.698GHz 6dB +0.15/-0.45dB@0.698-0.96GHz 6dB ±0.6dB@1.695-2.7GHz 6dB +0/-1.85dB@3.5-4.5GHz 6dB +0.1/-1dB@4.9-6GHz | 7dB +0.3/-1dB@0.35-0.38GHz 7dB -0.3/-1dB@0.38-0.698GHz 7dB ±0.5dBdB@0.698-0.96GHz 7dB ±0.7@1.695-2.7GHz 7dB +0.3/-1.4dB@3.5-4.5GHz 7dB ±0.7dB@4.9-6GHz | 8dB+0/-1.3dB@0.35-0.38GHz 8dB +0/-0.8dB@0.38-0.698GHz 8dB ±0.4dB@0.698-0.96GHz 8dB +0.15/-1dB@1.695-2.7GHz 8dB +0/-1.5dB@3.5-4.5GHz 8dB +0.1/-1.1dB@4.9-6GHz |
| Insertion Loss | dB | 1.8dB@0.35-0.96GHz 2.1dB@1.695-2.7GHz 2dB@3.5-4.5&4.9-6GHz | 1.65 | 1.5 | 1.15 |

## MODEL NUMBER SPECIFICATIONS

| Model Number | | TPS10E-350/6000 | TPS13E-350/6000 | TPS15E-350/6000 | TPS20E-350/6000 |
|---|---|---|---|---|---|
| VSWR | | 1.2:1@0.35-0.96&1.695-2.7GHz 1.3:1@3.5-4.5&4.9-6GHz | 1.2:1@0.35-0.96&1.695-2.7GHz 1.3:1dB@3.5-4.5&4.9-6GHz | | |
| Coupling Loss | dB | 10.0 | 13.0 | 15.0 | 20.0 |
| Coupling Tolerance | dB | 10dB +0/-1.3dB@0.35-0.38GHz 10dB +0./-0.8dB@0.38-0.698GHz 10dB ±0.45 dB@0.698-0.96GHz 10dB ±0.7dB@1.695-2.7GHz 10dB +0/-1.5dB@3.5-4.5GHz 10dB +0.1/-1.1dB@4.9-6GHz | 13dB ±1.0dB@0.350-0.38GHz 13dB ±0.7dB@0.38-0.698GHz 13dB ±0.5dB@0.698-0.96GHz 13dB ±0.65dB@1.695-2.7GHz 13dB +0.25/-1.25dB@3.5-4.5GHz 13dB +0.3/-1dB@4.9-6GHz | 15dB ±1.0dB@0.35-0.38GHz 15dB ±0.8dB@0.38-0.96GHz 15dB ±0.6dB@1.695-2.7GHz 15dB +0.3/-1.3dB@3.5-4.5GHz 15dB ±0.8dB@4.9-6GHz | 20dB ±1dB@0.35-0.38GHz 20dB ±0.8dB@0.38-0.96GHz 20dB +0.4/-1.1dB@1.695-2.7GHz 20dB +1.2/-0.8dB@3.5-4.5GHz 20dB ±1.5dB@4.9-6GHz |
| Insertion Loss | dB | 0.75 | 0.65 | 0.4 | 0.2dB@0.35-0.96&1.695-2.7GHz 0.3dB@3.5-4.5&4.9-6GHz |

## MODEL NUMBER SPECIFICATIONS



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| Model Number | | TPS30E-350/6000 |
|---|---|---|
| VSWR | | 1.2:1@0.35-0.96&1.695-2.7GHz<br>1.3:1dB@3.5-4.5&4.9-6GHz |
| Coupling Loss | dB | 30.0 |
| Coupling Tolerance | dB | 30dB+1.7/-0.3dB@0.35-0.698GHz<br>30dB +1.5/-0.2dB@0.698-0.96GHz<br>30dB ±1dB@1.695-2.7GHz<br>30dB +2.7/-0.8dB@3.5-4.5GHz<br>30dB +1.05/-2.5dB@4.9-6GHz |
| Insertion Loss | dB | 0.2 |

**External Document Links**

LINK to VEX FILES

**Notes**



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