PRODUCT DATASHEET

# TPS-E Public Safety Tapper Series

Public Safety Tapper/Unequal Divider for Wireless & Indoor Application, Support VHF, UHF, TETRA, and 700-900MHz Public Safety Bands with various coupling value from 3dB to 20dB

## PRODUCT DESCRIPTION

RFS Technologies TPS-E Public Safety series Tapper/Unequal Divider have been designed for a variety of wireless applications covering VHF, UHF, TETRA and 700 to 900MHz Public Safety bands. The innovative asymmetric design ensures an excellent input VSWR and coupling flatness across the specified bands. The unit couples off a defined fraction of a RF signal from 3 to 20 dB with minimal reflections or loss. The broad frequency range is ideally suited for Public Safety systems.

## FEATURES / BENEFITS

- **Public Safety bands 137MHz-960MHz**
- N Female Interface
- PIM Optimized Design (161dBc @2x43dBm)
- Low Insertion Loss
- High Power Handling
- Small Size, Low Weight
- Bracket supplied

# TECHNICAL FEATURES

## ELECTRICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Frequency Range** | MHz | 137-960 |
| **Power Rating** | W | 500 |
| **Peak Power** | W | 3000 |
| **PIM 3rd @2*43 dBm** | dBc | 161 |
| **Input Impedance** | Ohm | 50 |

## MECHANICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Connectors** | | N Female |
| **Dimensions, L*W*H** | mm(in) | 102.11*40.74*50.8<br>(4.02*1.6*2) |
| **Net Weight ±10%** | kg (lb) | 0.38(0.84) |
| **Temperature Range** | °C | -35 to +75 (+160 for 2hours in an event of fire, encased in DragonSkin Cabinet) |
| **IP Level** | | IP67 |
| **RoHS** | | Compliant |



All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

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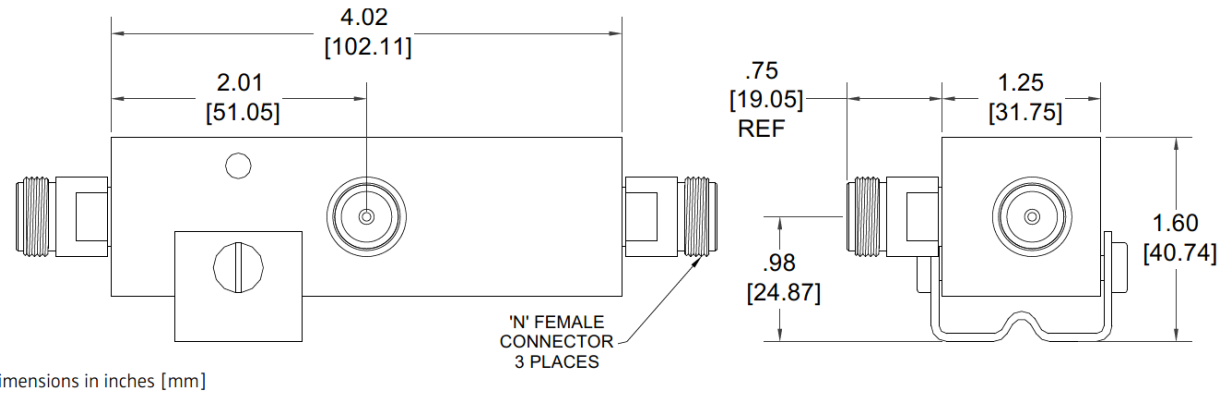
## MODEL NUMBER SPECIFICATIONS

| Model Number | | TPS3E-137/960 | TPS6E-137/960 | TPS10E-137/960 | TP15E-137/960 |
|---|---|---|---|---|---|
| VSWR | | 1.4:1@147-380MHz<br>1.3:1@380-960MHz | 1.3:1@147-380MHz<br>1.25:1@380-960MHz | 1.2:1@147-380MHz<br>1.2:1@380-960MHz | 1.2:1@147-380MHz<br>1.2:1@380-960MHz |
| Coupling Loss | dB | 3.0 | 6.0 | 10.0 | 15.0 |
| Coupling to Branch arm | dB | -6.3+/-0.7@137-200MHz<br>-5.8+/-0.6@200-250MHz<br>-5.4+/-0.6@250-380MHz<br>-5.1+/-0.6@380-520MHz<br>-4.8+/-0.5@698-960MHz | -8.1+/-0.7@137-200MHz<br>-7.6+/-0.6@200-250MHz<br>-7.3+/-0.6@250-380MHz<br>-7.0+/-0.6@380-520MHz<br>-6.5+/-0.5@698-960MHz | -11.0+/-0.8@137-200MHz<br>-10.7+/-0.7@200-250MHz<br>-10.3+/-0.7@250-380MHz<br>-10.1+/-0.7@380-520MHz<br>-9.9+/-0.5@698-960MHz | -16.0+/-0.8@137-200MHz<br>-15.6+/-0.8@200-250MHz<br>-15.5+/-0.8@250-380MHz<br>-15.2+/-0.8@380-520MHz<br>-15.4+/-0.5@698-960MHz |
| Output Split, Main/Branch | dB | -1.8/-4.8 | -1.0/-7.0 | -0.4/-10.4 | -0.1/-15.1 |

## MODEL NUMBER SPECIFICATIONS

| Model Number | | TPS20E-137/960 |
|---|---|---|
| VSWR | | 1.2:1@147-380MHz<br>1.2:1@380-960MHz |
| Coupling Loss | dB | 20.0 |
| Coupling to Branch arm | dB | -20.3+/-1.0@137-200MHz<br>-20.1+/-1.0@200-250MHz<br>-20.0+/-1.0@250-380MHz<br>-20.1+/-1.0@380-520MHz<br>-20.1+/-0.8@698-960MHz |
| Output Split, Main/Branch | dB | -0.1/-20.1 |




Dimensions in inches [mm]

### External Document Links

LINK to VEX FILES

### Notes

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