PRODUCT DATASHEET

TPS-43 6GHz Tapper Series

Broadband Tapper/Unequal Divider for Wireless & Indoor Application, Support 350-6000MHz with various coupling value from 3dB to 30dB

PRODUCT DESCRIPTION

RFS Technologies TPS-43 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**
- 4.3-10 Female Interface
- PIM Optimized Design (163dBc @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	163
Input Impedance	Ohm	50

MECHANICAL SPECIFICATIONS

Connectors		4.3-10 Female
Dimensions, L*W*H	mm(in)	143.5*46*25 (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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MODEL NUMBER SPECIFICATIONS

Model Number		TPS3-43-350/6000	TPS5-43-350/6000	TPS6-43-350/6000	TPS8-43-350/6000
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

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Broadband Tapper/Unequal Divider for Wireless & Indoor Application, Support 350-6000MHz with various coupling value from 3dB to 30dB

MODEL NUMBER SPECIFICATIONS

Model Number		TPS10-43-350/6000	TPS13-43-350/6000	TPS15-43-350/6000	TPS20-43-350/6000
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

Model Number		TPS30-43-350/6000
VSWR		1.2:1@0.35-0.96&1.695-2.7GHz 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 30dB +1.5/-0.2dB@0.698-0.96GHz 30dB ±1dB@1.695-2.7GHz 30dB +2.7/-0.8dB@3.5-4.5GHz 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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