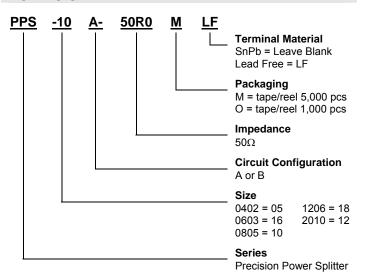


POWER SPLITTER – High Precision Power Chip Divider

The content of this specification may change without notification 10/23/08



HOW TO ORDER





FEATURES

- High Frequency Splitter is constructed of thin film resistive material
- Power splitter with excellent high frequency characteristics for applications from DC~20GHz
- This product has a small reflection feature, allowing for superior in high frequency applications
- Allows for high density mounting
- Bit error is restrained by keeping high frequency digital signal stable

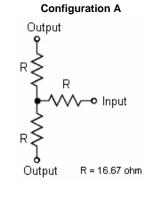
PPS-A ELECTRICAL CHARACTERISTICS

Item		PPS-16A	PPS-10	PPS-18A	PPS-12A		
Size		0603	0805	1206	2010		
Circuit Configuration		Α	A	Α	A		
Operating Frequency		DC~20GHz	DC~17.5GHz	DC~15GHz	DC~10GHz		
Insertion Loss	6 ± 0.5dB	DC~10GHz	DC~10GHz	DC~10GHz	DC~7.5GHz		
	6 ± 1.0dB	10~20GHz	10~17.5GHz	10~15GHz	7.5~10GHz		
Split Deviation		0.3dB max	0.3dB max	0.3dB max	0.3dB max		
VSWR	1.3	DC~10GHz	DC~10GHz	DC~10GHz	DC~7.5GHz		
	1.5	10~20GHz	10~17.5GHz	10~15GHz	7.5~10GHz		
Input Power at 70°C		100mW	125mW	250mW	500mW		
Max Overload Power		200mW	250mW	500mW	1000mW		
Resistance		R1 = R2 = R3 = 50Ω typical					
Operating Temperature		-40°C ~ +125°C					
Packaging		1,000/Reel or 5,000/Reel					

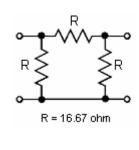
PPS-B ELECTRICAL CHARACTERISTICS

Item	PPS-10B	PPS-18B	
Size	0805	1206	
Circuit Configuration	В	В	
Resistance Tolerance	±0.1%, ±0.5%, ±1%		
TCR	±50ppm/°C	±50ppm/°C	
Power Rating per Element	33 mW	42 mW	
Power Rating per Package	100 mW	125 mW	
Rated Operating Temp	70°C		
Resistance	R1 = R2 = R3 = 50Ω typical		
Operating Temp. Range	-55°C ~ +125°C		
Package Quantity	1,000/Reel or 5,000/Reel		

CIRCUIT



Configuration B





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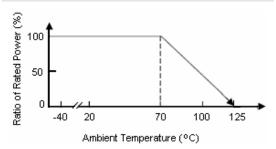


POWER SPLITTER – High Precision Power Chip Divider

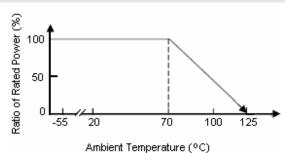
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DERATING CURVE - Circuit A



DERATING CURVE - Circuit B



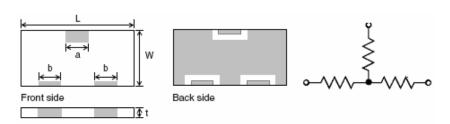
DIMENSIONS (mm)

Series	L	W	а	b	t
PPS-05A	1.00 ± 0.2	0.50 ± 0.2	0.4 ± 0.1	0.30 ± 0.1	0.4 ± 0.10
PPS-16A	1.60 ± 0.2	0.80 ± 0.2	0.4 ± 0.1	0.30 ± 0.1	0.4 ± 0.10
PPS-10A	2.00 ± 0.2	1.25±0.2	0.4 ± 0.1	0.30 ± 0.1	0.4 ± 0.10
PPS-18A	3.20 ± 0.2	1.60 ± 0.2	0.3 ± 0.1	0.35 ± 0.1	0.4 ± 0.10
PPS-12A	0.50 ± 0.2	2.5 ± 0.2	0.35 ± 0.1	0.65 ± 0.1	0.8 ± 0.15

SCHEMATIC LEGEND

- 1. Thin Film Resistor
- 2. Overcoat Resin
- 3. Terminal (SnPb or Lead Free)
- 4. Marking (dot to indicate direction & bar)
- 5. Alumina Substrate

SCHEMATIC - Circuit A



PERFORMANCE

Item	Test Condition		
Short Time Overload	2.5 times of the rated voltage shall be applied for 5 seconds.	±0.1%	
Rated Load Life	Apply rated voltage for 90 min followed by a pause of 30 min at 70±3°C for 10	±0.25%	
Moisture Load Life	The chip divider is applied rated voltage for 90 min at 60±2°C 90~95%RH for	±0.25%	
Temperature Cycle	[-55°C (30min)-R.T.(3min)-+125°C(30min)-R.T.(3min)] is repeated 5 cycles.	±0.1%	
Soldering Heat Resistance	Leave NR in melt solder of 260±5°C for 10±1 seconds.		
Strength Between Terminals	Distance between fulcrums : 90mm; Bending width : 3mm; Substrate: Glass epoxy t=1.6mm		±0.1%
Solderability	Leave NR in melted solder of 235±5°C for 3±0.5 seconds. ≥95% of the surface		e should be wet
Insulation Resistance	A minute after 500 DC		≥ 1000M Ω

^{***} Custom Designs Available



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