Features and Benefits

1.0 GHz Sub Split Diplex Filter
DPA42-54

This Antronix series of diplex filters is specifically designed for applications requiring the diplexing/separation of downstream and upstream frequency bands. These diplexers have all the reliability factors of our Antronix legacy drop passives.

The DPA42-54 diplex passes the 54-1002 MHz downstream frequency band on its HIGH port and passes the 5-42 MHz sub split upstream frequency band on its LOW port with excellent isolation between the bands.

- **6 kV Ring Wave Surge Withstand**
  All ports withstand multiple 6 kV ring wave surges per IEEE specification C62.41 Category A3.
- **Eclipse Contact Technology (ECT) F-port**
  Provides 400% more contact surface area for lower contact resistance and higher reliability.
- **Zinc Alloy Diecast Housing w/ 100% Soldered Backplate**
  Superior corrosion resistant tin plating with repeatable RFI shielding.
- **Flat 15 psi sealed**
  Prevents water migration into the splitter.
- **Integrated Mounting Tabs and Heavy Duty Ground Block**
  Ease of installation and years of reliable service.

ANTRONIX®

Specifications
DPA42-54

Specification	Freq (MHz)	Max/Min	Typ
Insertion Loss			
Common to Low (dB)	5-42	≤ 1.5	≤ 1.0
Common to High (dB)	54-1002	≤ 1.2	≤ 0.9
Stopband Attenuation			
Common to Low (dB)	54-1002	≥ 45	≥ 48
Common to High (dB)	5-42	≥ 45	≥ 48
Isolation			
Low to High (dB)	5-42	≥ 45	≥ 48
	54-1002	≥ 45	≥ 48
Return Loss			
Common (dB)	5-42	≥ 16	≥ 18
	54-1002	≥ 16	≥ 18
Low (dB)	5-42	≥ 16	≥ 18
High (dB)	54-1002	≥ 16	≥ 18

General	
Nominal Impedance	75Ω
F-connector Type	SCTE Compliant ECT F-port

Environmental	
Operating Temperature	-40°C to +60°C
Surge Withstand	6 kV Ring Wave Surge, IEEE C62.41 Cat. A3
Pressure Seal	15 psi
Corrosion Resistance	ANSI/SCTE-143 salt spray for 1000 hours