



DC Block

This DC Block is used to prevent the flow of direct current and low frequency current surges along the inner conductor of a transmission line, while permitting the unimpeded flow of RF signals. Applications include the blocking of current surges in subway tunnels and antenna sites. The unit consists of a length of coaxial line with a distributed series capacitor in the center conductor to block the flow of DC and low frequencies, while passing RF with negligible loss or reflections.

FEATURES / BENEFITS

- Multi-Band Coverage
- 500 W Avg. Power Rating
- 3 kV High Voltage Rating
- Minimal RF Insertion Loss
- Very Low Passive IM
- RoHSCompliant
- High Reliability
- N male/female connector

Technical Features

GENERAL SPECIFICATIONS

| | | |
|------------------------|--|----------|
| Product Type | | DC Block |
| Techn. Application | | Outdoor |
| Number of Input Ports | | 1 |
| Number of Output Ports | | 1 |

ELECTRICAL SPECIFICATIONS

| | | |
|--------------------------|---------|---|
| Frequency Range | MHz | 380 - 2700 |
| Impedance | Ohm | 50 |
| Insertion Loss max. | dB | 0.12 @380 - 800 MHz 0.08 @800 - 2700 MHz |
| Max. VSWR / Return Loss | VSWR/dB | 1.30/17.7 @380 - 800 MHz 1.20/20.8 @800 - 2700 MHz |
| Intermodulation (IM3) | | 150 dBc with 2x43 dBm tones |
| Avg. RF Power | W | 500 |
| Max. RF Power | W | 10000 |
| Max. DC Blocking Voltage | kV | 3 |

MECHANICAL SPECIFICATIONS

| | | |
|-----------------------|---------|-------------|
| Connectors | | N |
| Input Connector Type | | N male |
| Output Connector Type | | N female |
| Diameter | mm (in) | 15.9 (0.63) |
| Weight | kg (lb) | 0.65 (1.43) |

TEMPERATURE SPECIFICATIONS

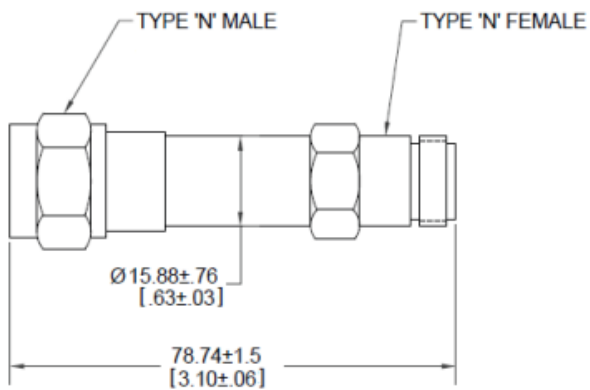
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|-------------------|---------|-----------------------|
| Temperature Range | °C (°F) | -35 to 75(-31 to 167) |
|-------------------|---------|-----------------------|

TESTING AND ENVIRONMENTAL

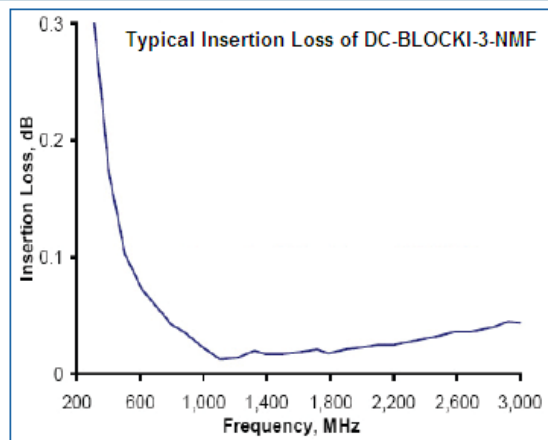
| | | |
|---------------------|--|-------|
| Environmental Class | | IP 65 |
|---------------------|--|-------|



DC Block



DC-BLOCKI-3-NMF1 sketch.png



DC-BLOCKI-3-NMF1 typ insertion loss.png

External Document Links

Notes