

Filtered Audio Connectors

ESD protection up to 8kV direct discharge and 15kV air discharge



Features

- Easy retrofit or upgrade
- Reduced cost and lead times
- Design flexibility and quality assurance
- Versatility
- Custom designs available

Applications

- Aerospace
- Communications and security equipment
- Harsh condition environments
- Where an electronic system may be exposed to ESD environments

API Technologies has modified the standard MIL-DTL-55116 connectors that are used in 60 volt/0.5 Amp audio frequency circuits to provide effective EMI filtering. API's filtered audio connectors are waterproof and polarized, five or six pin electrical plugs/receptacles and can be designed for special and selectively loaded EMI filtering. These custom filtered audio connectors meet all the requirements of MIL-STD-810F including sand and dust, salt, fog, high altitude operation, fungus resistance and immersion to 20 meters.

The audio connectors also can include ESD (electrostatic discharge) protection up to 8kV direct discharge and 15kV air discharge. Custom designs addressing other discharge requirements are available.

| Filter Circuits | Capacitance | | Dielectric Withstanding Voltage | Working Voltage DC | 3 dB Cut-Off Frequency Max. (MHz) | Minimum Insertion Loss – Decibels (dB) | | | | | | | |
|-----------------|-------------|-----------|---------------------------------|--------------------|-----------------------------------|--|--------|--------|--------|---------|---------|--------|----------|
| | Value | Tol. | | | | 5 MHz | 10 MHz | 20 MHz | 50 MHz | 100 MHz | 200 MHz | 50 MHz | 1000 MHz |
| C | 1000 | +100, -0% | 300V | 100V | 3.2 | - | 5 | 10 | 17 | 23 | 30 | 37 | 43 |
| C | 5000 | +100, -0% | 300V | 100V | 0.64 | 10 | 16 | 22 | 30 | 35 | 41 | 50 | 52 |
| Pi | 1000 | +100, -0% | 300V | 100V | 3.2 | - | 5 | 9 | 19 | 30 | 43 | 62 | 70 |
| Pi | 4000 | +100, -0% | 300V | 100V | 0.8 | 8 | 13 | 20 | 35 | 48 | 61 | 76 | 80 |