CABLE ASSEMBLY CAPABILITIES

Industry-Standard MIL-DTL-17 Flexible Cable Assemblies
SV Microwave supplies a full range of general-purpose cable assemblies using MIL-DTL-17 type cable. These cost-effective, high-quality assemblies are custom built using exacting manufacturing processes. Depending on the customer requirement, both standard and QPL connectors are available.

Extended Frequency Flexible Cable Assemblies
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MIL-DTL-17 FLEXIBLE CABLE ASSEMBLIES

Features:
• Industry-standard cable types
• Various standard coaxial connectors
• Multiple connector attachment options
• RG cable sizes ranging from approx. .072 to .500 inch (1.8 to 12.7 mm) diameter
• Economical RF interconnect solutions

Applications:
• OEM market
• Between equipment interconnect
• Internal interconnect
• Wireless and GPS
• Control and command

![Image of flexible cables]

**Typical Cable Types**

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<th>RG Number</th>
<th>MIL-DTL-17 Number</th>
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![Graph of attenuation vs. frequency]

![Graph of CW power vs. frequency]
**EXTENDED FREQUENCY, FLEXIBLE CABLE ASSEMBLIES**

**Features:**
- Extended frequency flexible cable
- Various standard coaxial connectors
- High shielding
- Low attenuation
- RG cable sizes ranging from approx. .072 to .500 inch (1.8 to 12.7 mm) diameter
- Economical microwave interconnect solutions

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- Radar and EW systems
- General test cables

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**Diagram Descriptions:**
- **Attenuation Chart:**
  - Frequency range: 0 to 20 GHz
  - Attenuation dB/100ft scale: 0 to 140 dB
  - Cable Types: T FLEX 405, T FLEX 402, DB316, SF316, SF142

- **Power Chart:**
  - Frequency range: 0.1 to 100 GHz
  - Power range: 0 to 1000 Watts
  - Frequency range: 0.1 to 100 GHz
  - Power range: 0 to 1000 Watts
  - Cable Types: T FLEX 405, T FLEX 402, DB316, SF316, SF142

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**E-Mail:** sales@svmicro.com  • **Website:** www.svmicrowave.com

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Phone: 561-840-1800  •  FAX: 561-842-6277
FORMABLE CABLE ASSEMBLIES

Features:
- Formable high-frequency cable
- Cost-saving alternative to semi-rigid
- Bend without specialized equipment
- Various standard coaxial connectors
- High shielding
- Low attenuation
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- Radar and EW systems
- Semi-rigid replacements

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Features:
- Standard MIL-DTL-17 specification cable
- Various standard coaxial connectors
- High shielding
- Tight bend radius
- RG cable sizes ranging from approx. .072 to .500 inch (1.8 to 12.7 mm) diameter
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Applications:
- OEM market
- Internal interconnect
- Wireless and GPS
- Control and command
- Radar and EW systems
- High-shielding requirements
- Instrumentation

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CABLE ASSEMBLY TESTING AND QUALITY ASSURANCE

Electrical Testing
- Frequency ranges from DC to 50 GHz
- Insertion loss
- VSWR
- Phase and phase matching
- RF leakage
- Continuity
- DWV

Environmental and Mechanical Testing
- Failure analysis/DPA capabilities include:
  - XRF
  - Cross section
  - High-magnification photography
  - Solderability
  - Tensile strength
  - Salt fog
  - Shock and vibration
  - Altitude
  - Industrial corrosion

Quality Assurance
- ISO 9001-2000 registered
- Quality approved to MIL-I-45208 and MIL-STD-790
- Calibration system compliant to ISO10012-2
- Operators trained in IPC-STD-001C requirement for soldering electrical and electronic assemblies
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