

### LINE OF PRODUCTS

M17/94-RG179  
M17/136-00001

### CONSTRUCTION

- 1- CONDUCTOR:  
Stranded Silver plated copper  
clad steel
- 2- DIELECTRIC:  
Extruded PTFE
- 3- SCREEN:  
Single braid  
Silver plated copper
- 4- JACKET:  
T° = 200°C FEP  
T° = 230°C PFA

To MIL C 17 US specification

#### Main characteristics:

- **Operating temperature:**  
-90 to +200°C (FEP outer jacket)  
-90 to +230°C (PFA outer jacket)
- **Continuous working voltage:**  
900 V
- **Maximal operating frequency:**  
3 GHz

Good resistance to aircraft fluids

Good resistance to flame NFC 32070/C1 & C2 (CEI 332-1).

Easy solder connection

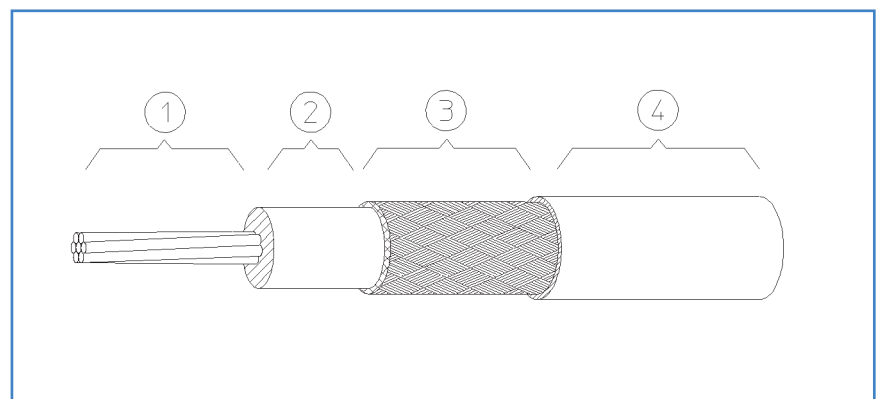
#### Application

High frequency connections operating at high temperature.

By their small dimensions, they are mainly designed for miniaturized connections, operating at high or low temperature.

#### Recommended connectors

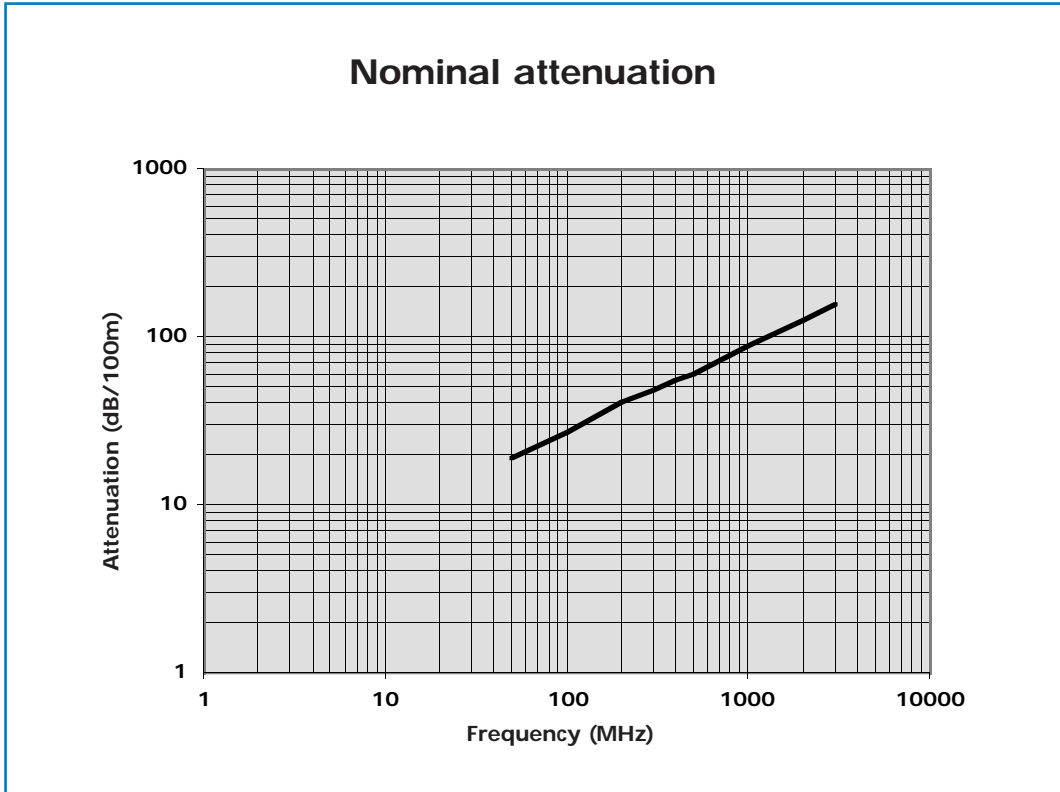
SMB - SMC - N - etc.



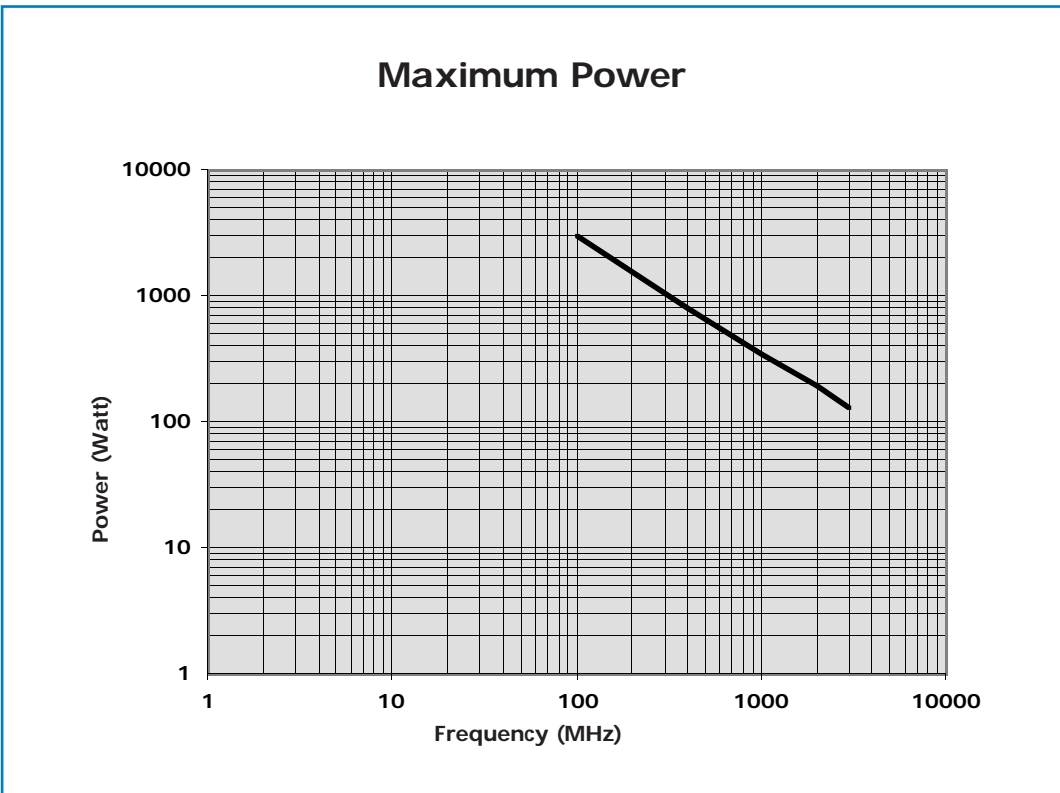
## COAXIAL 75 $\Omega$ - 200°C/230°C PTFE - OD 2.50 mm

SPECIFICATIONS	MIL C 17	
DESIGNATION	M17/94-RG179	M17/136-00001
Previous reference	RG 179 BU	RG 187 AU
CONSTRUCTION DETAILS & WEIGHT		
CONDUCTOR Diameter (mm)	7 x 0.10 mm S.P.C.C.S. 0.30	7 x 0.10 mm S.P.C.C.S. 0.30
DIELECTRIC Diameter (mm)	Extruded PTFE 1.60 ± 0.08	Extruded PTFE 1.60 ± 0.08
BRAID	S.P.C.	S.P.C.
JACKET Diameter (mm)	FEP 2.54 ± 0.13	PFA 2.54 ± 0.13
Nominal weight (g/m)	16.9	16.9
ELECTRICAL PROPERTIES		
Capacitance (pF/m)	<75.5	<72.2
Relative velocity of propagation (%)	69.5	69.5
Characteristic impedance at 200 MHz ( $\Omega$ )	75 ± 3	75 ± 3
Attenuation	See diagram	
Maximum power	See diagram	

COAXIAL 75 Ω - 200°C/230°C PTFE - OD 2.50 mm



**Short formula of attenuation calculations**  
(to be applied above 50 MHz frequency)  
 $\alpha(\text{dB}/100\text{m}) = 2.69 \sqrt{F(\text{MHz})} + 0.003 F(\text{MHz})$



## COAXIAL 75 $\Omega$ - 200°C/230°C PTFE - OD 2.50 mm

### Similar cables (Filotex® specifications)

- Double braids coaxial cables (higher shielding effectiveness)
  - RG 179 BU DT
- Triaxial cables
  - Study 69711
- Reduced overall diameter coaxial cables
  - Study 96911
  - Study 124630 (Study 96911 DT)
  - Study 123775
  - Study 123776 (Triaxial)
- Multicoaxial cables