



Flexible cable 5/50 D (Power 142: alternative to RG142)



P/N: ST291 325 270

APPLICATION NOTE

Designed by Radiall, POWER142 is an alternative solution to ECO142 when high power level is required:

- **Advantageous in term of electrical performance:** its optimized construction allows better attenuation and screening effectiveness than RG142 and higher power level than ECO142.
- **Environmental advantages:** the flame retardant jacket allows POWER142 to meet fire resistance standards.
- **Advantageous in term of price:** POWER142 design has integrated all Radiall knowledge to reach the best performance with a very competitive price.
POWER142 is UL style 1375 approved.

This cable is compatible with a large range of connector series.

Typical attenuation for a couple of connectors (dB) = $0.045 \times \sqrt{f}$ (GHz)

CONSTRUCTION / DIMENSIONS

	Material	mm	Inches
Center conductor	Solid SPC ⁽¹⁾	0.92	0.036
Dielectric	Solid PTFE ⁽²⁾	2.97	0.117
Inner shield	Al ⁽³⁾ foil	3.20	0.126
Outer shield	TC ⁽⁴⁾ braid	3.60	0.142
Jacket	Black LSZH PE ⁽⁵⁾	4.50	0.177

ELECTRICAL CHARACTERISTICS

Characteristic impedance	50Ω ± 2Ω	
Operating frequency range	DC - 3 GHz	
Shielding effectiveness	90 dB (DC - 3 GHz)	
Voltage withstanding	5 000 V rms	
Peak power	3.4 kW	
Capacitance	97 pF / m	29.3 pF / ft
Velocity of propagation	69 % (4.8 ns / m)	