75Ω Ultra- Miniature Push-on Lock Coaxial Connectors

PL75 Series



Features

1. Further reduction in size

Reflecting the need for smaller devices, the size is reduced by approximately 30% when compared with the PL71 Series 75 Ohm connectors.

2.Secure lock

Unique design of the lock/release, protected by outer shell, assures reliable and stable electrical and mechanical connection.

3. High degree of impedance matching

V.S.W.R of 1.3 max for frequencies of DC to 1.5 GHz.

4. RoHS compliant

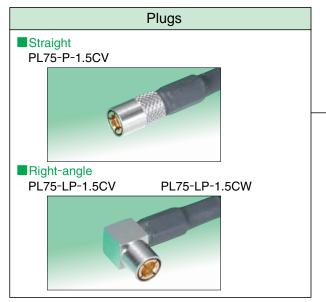
All components and materials comply with the requirements of EU Directive 2002/95/EC.

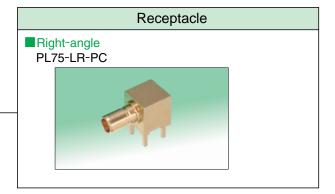
PL75 and PL71 Size Comparison ●Right-angle receptacles [PL71] 14.9 [PL75] 9.2 4.5 ϕ 0.7 $\phi 0.7$ [PL71] ●Right-angle plugs 14.4 [PL75] □6.7_□ □5 4 φ4.8 ϕ 6.5

Applications

Satellite digital networks, CATV, broadcasting equipment, visual equipment and other applications requiring highly reliable coaxial cable connections.

■Mating Chart



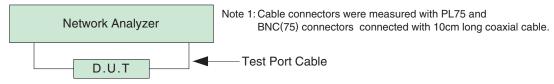


■Specifications

Ratings	Nominal characteristic impedance: 75Ω	Operating temperature range:-30°C to +85°C	
Railigs	Frequency range : DC to 1.5 GHz	Operating humidity : RH 95% max.	
Item	Specification	Conditions	
1. Insulation resistance	1,000 MΩ min.	250 V DC	
2. Withstanding voltage	No flashover or insulation breakdown	250 V AC / 1 minute	
3. Contact resistance	Center contact : 15 m Ω max. Outer shell: 6 m Ω max.	100 mA max.	
4. Center contact retention force	0.2 N min.	Measured with 0.3 mm diameter pin gauge	
5. V.S.W.R. *	1.3max.	DC to 1.5GHz	
6. Vibration	No electrical discontinuity of 1 μ s or longer	Frequency: 10 to 500 Hz, single amplitude of 0.75 mm,	
	No damage, cracks, or parts dislocation	acceleration of 98m/s², 2 hours in each of the 3 axis	
7.Moisture resistance	Insulation resistance: $10~M\Omega$ min. (high humidity) Insulation resistance: $1,000~M\Omega$ min. (dry) No damage, cracks, or parts dislocation	96 hours at +40℃ and humidity of 90% to 95%	
8. Temperature cycle	Contact resistance Center contact $: 19 \text{ m}\Omega$ max. Outer shell $: 10 \text{ m}\Omega$ max. No damage, cracks, or parts dislocation	Temperature:-30 °C → +5 °C to +35 °C → +85 °C → +5 °C to +35 °C Time: 30 min. → 5 min.max. → 30 min. → 5 min.max. 5 cycles	
9. Durability	Contact resistance: Center contact $: 19 \text{ m}\Omega$ max. Outer shell $: 10 \text{ m}\Omega$ max. No damage, cracks, or parts dislocation	500 cycles	
10. Salt spray	No corrosion	5% salt water solution, 48 hours	

^{*} V.S.W.R. Measurement System

The above V.S.W.R. standard values were measured using the measurement system shown below.



■Materials / Finishes

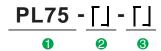
●Plugs

Part	Material	Finish
Shell	Brass	Gold plated
Male center contact	Phosphor bronze	Gold plated
Female center contact	Beryllium copper	Gold plated
Insulator	PTFE	
Crimp sleeve	Brass	Nickel plated

●Receptacle

Part	Material	Finish
Shell	Brass	Gold plated
Male center contact	Phosphor bronze	Gold plated
Female center contact	Beryllium copper	Gold plated
Insulator	PTFE	

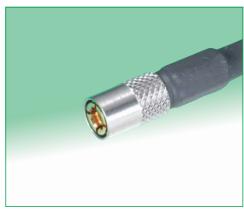
■Ordering information

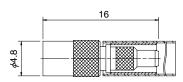


1 Series n	ame	:PL75
Connect	or type)
Р	:Strai	ght plug
LP	:Righ	t-angle plug
LR	:Righ	t-angle plug receptacle
Applicabl	e cable	(plug) or board mounting (receptacle) style
1.5CV	:1.5C	CA-EXBV(LF)
1.5CW	:1.5C	C-QEW.CW
PC	:DIP	mounting

■Plugs

●Straight



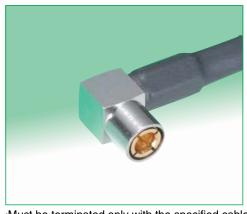


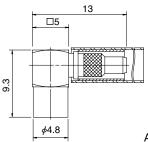
All dimensions: mm

Part Number	CL No.	Applicable cable	RoHS
PL75-P-1.5CV	334-0078-0	1.5CCA-EXBV(LF)	YES

[·]Must be terminated only with the specified cable.

●Right angle





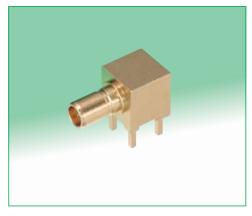
All dimensions: mm

Part Number	CL No.	Applicable cable	RoHS
PL75-LP-1.5CV	334-0076-4	1.5CCA-EXBV(LF)	YES
PL75-LP-1.5CW	334-0080-1	1.5C-QEW.CW	123

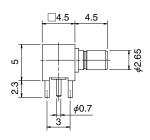
[·]Must be terminated only with the specified cable.

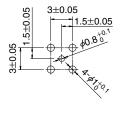
■Receptacle

●Right angle



●PCB mounting pattern





All dimensions: mm

Part Number	CL No.	RoHS
PL75-LR-PC	334-0075-1	YES