MicroCom Circular Connector









The MicroCom line meets the need for ultra miniature high reliable connectors that can be assembled simply and rapidly. Our design concept makes possible special features and preassembled parts that assure the user of unbelievable simple, rapid and economical assembly. The coaxial connectors require only a single operation to attaché the connector and cable. With the crimping of the cable, the separation force between the cable and the connector approaches the average breaking strengths of the shield.

The multipin connectors and correspondingly simple to assemble, with a minimum of loose parts and minimum of assembly operation to perform.

This technique resulting a tremendous saving for tooling and labor costs.

The result of our special design is an extremely high EMC shielding, highest reliability even in very harsh environment

Typical Specification

Electrical

Insulation resistance $10.000 \text{ M}\Omega$ per MIL-C-22557

Rated working voltage 400V @ sea level

Dielectric withstanding 1.000 V @ sea level per MIL-C-22557 Contact voltage drop 4 mV @ 1 amp per MIL-C-22557 Contact resistance 4 m Ω @ 1 amp per MIL-C-22557 Contact current rating 3 amp per MIL-C-22557

Environmental

Vibration Mil Std. 202A, method 204 test condition B (15g's)

No discontinuity in excess of 1 microsecond

Shock Mil Std. 202, method 202, 200g's. No evidence of damage

Temperature Cycling Mil Std. 202, method 102 condition C

Corrosion (Salt Spray) Mil Std. 202, mthod 10, condition B 5% salt solution Moisture resistance Mil Std. 202C, method 106B, omitting steo 7b and hogh

humidity tests

Mechanical

Contacts contacts are constrained in both directions

Engaging force 0,8N per contact

Coupling retention torque 60Nmm

Contact durability 5000 cycles with contact resistance within min. Mil-C-22557 Cable retention separation force equal to breaking strengths of shield of

The cable per Mil-C-22557

General

Standard shell Brass per QQ-B-626 Insulators PEEK per Mil-P-46183

Plating Gold per Mil-G-45204, Typ 2, Class 1
Gasket Silicone rubber per AMS 3304

Comtronic reserve the right to make improvements without advance notice.

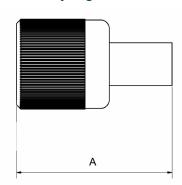




MicroCom coaxial plug

extremely high EMC shielding





MicroCom Coaxial connectors 10/32 UNF thread

The CMR Series is an extremely reliable miniature connector. Gold plated materials assure an outstanding EMC shielding. These connectors are 100% equivalent to MALCO/Microdot 10/32 thread

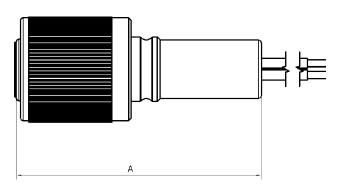
	Shell style	A Total lengths	Cable types
CMR-O2-B-01P-KL	Cable connector	19,60	RG 174 RG 196 RG 188 RG 316
CMR-O2-B-01P-KS	Cable connector	13,20	RG 178
CMR-O2-J-01P-KL	Cable connector 90° angled	33,00	RG 174 RG 196 RG 188 RG 316





MicroCom 4-way plug

extremely high EMC shielding



	Variances XX	Replace XX by	Shell style	A Total lengths	Cable entry	Max. wire gauge
CMRM-O2-B-04S M4,5 thread	Gold plated Black chromate	O2 B1	Cable connector	11,50	1,70 mm	AWG 32
CMR-O2-B-04S 1/4-28 UNF thread	Gold plated	O2	Cable connector	13,00	3,15	AWG 28
CMR-O2-B-04S-IP67 1/4-28 UNF thread	Gold plated	O2	Cable connector	13,00	3,15	AWG 28
CMR-O2-G-04S 1/4-28 UNF thread	Gold plated	O2	Cable connector 90° angled	20,40	3,15	AWG 28
CMRH-O2-B-04S 5/16 thread	Gold plated	O2	Cable connector	18,20	4,80	AWG 26
CMREH-O2-B-04S 5/16 thread	Gold plated	O2	Cable connector	18,20	4,80	AWG 22
CMR-O2-B-04S-PCB 1/4-28 UNF thread	Gold plated	02	Cable connector	17,70	3,15 mm	AWG 30
CMR-O2-B-04S-PCB-357 1/4-28 UNF thread	Gold plated	O2	Cable connector	17,70	3,15 mm	AWG 30

Standard version 1/4-28 thread

The CMR Series is an extremely reliable miniature connector. Gold plated materials assure an outstanding EMC shielding. Water tight IP 67 available The CMRH and CMREH are the ruggedised version for harsh environment

Special for PCB accelerometers

For PCB accelerometers we offer

The suitable connectors. **Call us for further information**

Ultra miniature CMRM Series M 4,5 thread

The CMRM Series is smaller and lighter than the CMR Series. It has a M4.5 thread. The wires that can be used are AWG 32 max.

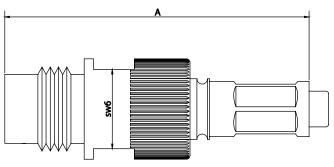




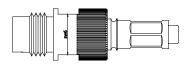


MicroCom 4-way receptacle

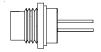
extremely high EMC shielding



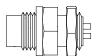
Shell style "B"



Shell style "C" PCB contacts



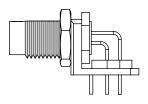
Shell style "D" Solder pots



Shell style "E" Solder pots



Shell style "F" PCB contacts



Part number	Plating Variances XX	Replace XX by	Shell style	Α	Cable entry	Max. wire gauge
CMRM-XX-B-04P M4,5 thread	Gold plated Black chromate	O2 B1	Cable connector	11,50	2,7 mm	AWG 32
CMR-XX-B-04P 1/4-28 thread	Gold plated	O2	Cable connector	23,00	4,2 mm	AWG 28
CMRH-O2-B-04P 5/16 thread	Gold plated	O2	Cable connector	23,00	5,0 mm	AWG 26
CMREH-O2-B-04P 5/16 thread	Gold plated	O2	Cable connector	23,00	5,0 mm	AWG 22
CMRM-XX-C-04P	Gold plated Stainless steel	O2 S1	PCB mounting	6,10	-	AWG 25 Solid wire
CMRM-O2-C-04P- GND	Gold plated	O2	PCB mounting with grounding pin	6,10	-	AWG 25 Solid wire
CMRM-T1-C-04P-H	Titanium grade	1 T1	PCB mounting hermetic	6,10	-	AWG 25 Solid wire
CMR-XX-C-04P	Gold plated Stainless steel Hermetic sealed	O2 S1 H at the end of PI	PCB mounting	7,60	-	AWG 25 Solid wire
CMRM-XX-D-04P	Gold plated Black chromate	O2 B1	Thread mount	11,30	-	AWG 32
CMR-O2-D-04P	Gold plated	O2	Thread mount	14,80	-	AWG 28
CMRH-O2-D-04P	Gold plated	O2	Thread mount	15,30	-	AWG 26
CMR-O2-E-04P	Gold plated	O2	Solder mount	10,70	-	AWG 28
CMR-O2-E-04P	Gold plated	O2	PCB mounting 90° angled	20,40	-	AWG 25 Solid wire



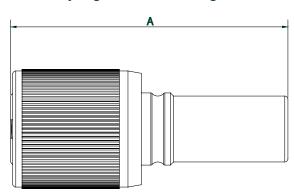


MicroCom 12-way plug and receptacle

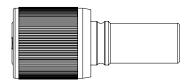
extremely high EMC shielding





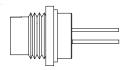


Shell style "B"

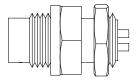


Part number	Plating Variances XX	Replace XX by	Shell style	Α	Cable entry	Max. wire gauge
CMR-O2-B-12S plug	Gold plated	O2	Cable connector	18,60	4,60	AWG 30
CMR-O2-B-12P Receptacle	Gold plated	02	Cable connector	18,20	4,60	AWG 30
CMR-O2-C-12P	Gold plated	02	PCB mounting	18,20	-	AWG 25 Solid wire
CMR-O2-D-12P	Gold plated	O2	Thread mount	17,40	-	AWG 30

Shell style "C" PCB contacts



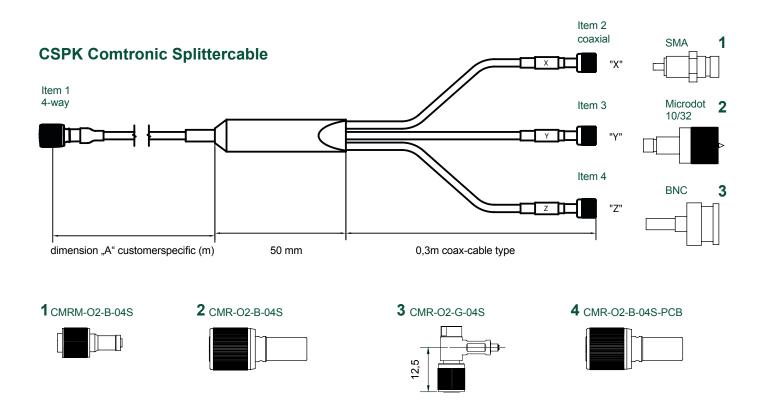
Shell style "D" Solder pots





MicroCom 4-way cable assemblies

splitted on coaxial connectors



Stainless steel connector with flange for space application



High speed data connector for 1 Gbit transmission



Worldwide smallest coaxial connector for Pico Coaxial cables overall diameter 1.20 mm
Qualified for aircraft application







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