



MCA[®] & MCAH[®] MINI COAX AUTOMOTIVE

5G Miniaturized Highspeed multi-pole RF Solutions

- » Compact design solutions
- » High speed data transmission up to 20 Gbit/s
- » Excellent radio frequency (RF) performance up to 15 GHz
- » Scalable multi-pole connections



MCA[®] & MCAH[®] Mini Coax Automotive

Your Enabler for autonomous driving

The newly developed MCA[®] & MCAH[®] series by IMS Connector Systems complies with the high requirements set by the automotive industry for coaxial interconnections in high speed data transmission up to 20 Gbit/s and frequency range up to 15 GHz.

To ensure safety, driver assistance systems and autonomous driving require higher rates of real-time data in order to calculate routes continuously, recognize and classify objects, and determine spatial distances. High data volumes from different cameras, various sensors and navigation sources have to be aggregated.

This new MCA[®] & MCAH[®] connector series is compliant with the new Mini-Coax Interface from VW, aka Mini-FAKRA.



Product Features

- » Compact design
- » Significantly smaller than FAKRA in width and height
- » High speed data transmission up to 20 Gbit/s
- » Excellent RF performance up to 15 GHz
- » Scalable multi-pole connections
- » Hybrid RF & LF signal combinations possible
- » Optimized footprints & SMT options available
- » Complete individual signal shielding
- » In compliance to USCAR 2 & USCAR 49

Optimized installation space

- » Save up to 80% of space compared to FAKRA
- » Replace 4 single FAKRA with 1MCA[®] & MCAH[®]



Product Features

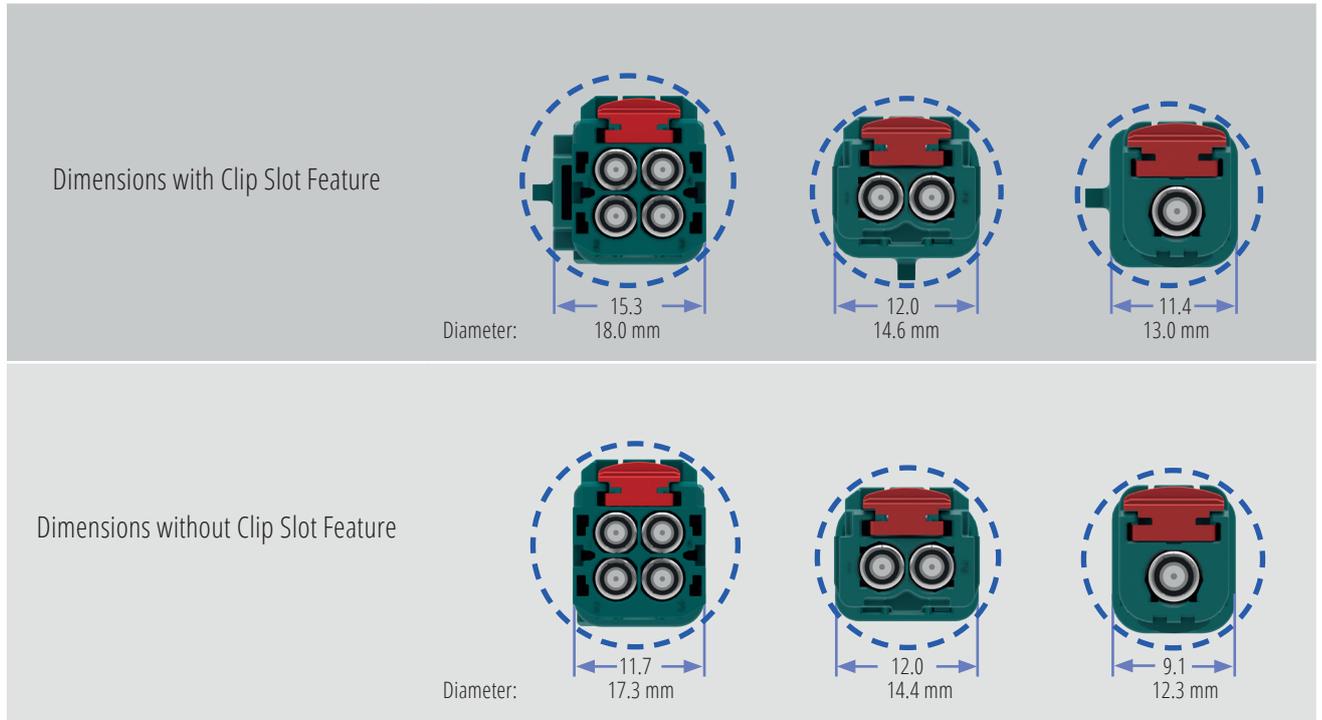
- » Common ISL (Independent Secondary) locking for Male & Female
- » Common CPA (Connector Position Assurance) Integration
- » Various fixation clip-slot (CS) available: 7mm / 11mm / without CS
- » Pre-assembly Locking Feature for perfect terminal position
- » Cavity compatible solution based on OEM requirement
- » 100% intermate ability with mini coax market players

High safety and robust design features	<p>1, 2, 4 - Pole</p> <p>Pre-assembly locking feature for perfect terminal position</p> <p>Additional safety through secondary Locking</p>
	<p>4 - Pole</p> <p>Male MCA Terminal Assembly</p> <p>Male Housing</p> <p>Independent Secondary Lock</p> <p>CPA</p> <p>Female Housing</p> <p>Female MCA Terminal Assembly</p> <p>Independent Secondary Lock</p>
	<p>2 - Pole</p> <p>Male MCA Terminal Assembly</p> <p>Male Housing</p> <p>Independent Secondary Lock</p> <p>CPA</p> <p>Female Housing</p> <p>Female MCA Terminal Assembly</p>
	<p>1 - Pole</p> <p>Male MCA Terminal Assembly</p> <p>Male Housing</p> <p>Independent Secondary Lock</p> <p>CPA</p> <p>Female Housing</p> <p>Female MCA Terminal Assembly</p>



Product Features

- » Size optimized pass thru holes



APPLICATIONS

- » Autonomous Driving
- » ADAS (Advanced Driver Assistance System)
- » Camera, Radar, Lidar
- » Infotainment & Navigation
- » Next Generation WLAN (WiGig-Wireless Gigabit)
- » V2X & V2C
- » eCall services
- » GNSS (Global Navigation Sattelite Systems)



MCA® Product portfolio

	Picture	Pole	Description	Locking position	Type	Style	Part number (P/N)	Packaging	Plating
HEADER TYPES		4	PLUG PCB mount angle plug 4-pole	06:00	angle	Short Version	5488.MCA.1X20.007	Tape and reel packaging	7 = Sn
			PLUG PCB mount angle plug 4-pole	12:00	angle	Long Version	5497.MCA.1X20.007	Tape and reel packaging	7 = Sn
			PLUG PCB mount angle plug 4-pole	12:00	straight	-	5370.MCA.1X10.007	Tape and reel packaging	7 = Sn
		2	PLUG PCB mount angle plug 2-pole	12:00	angle	-	5649.MCA.1X20.007	Tape and reel packaging	7 = Sn
		1	PLUG PCB mount angle plug 1-pole	12:00	angle	-	5648.MCA.1X20.007	Tape and reel packaging	7 = Sn

Coding

Replace the X in the P/N for your required coding. Available codings:

A	B	C	D	E	F	Z
Jet black	Cream	Light blue	Claret violet	May green	Nut brown	Water blue



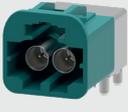
MCA® Product portfolio

Picture	Pole	Description	Cable type	CPA	Clipslot	Part number (P/N)	Packaging	Plating
	4	JACK Cable mount jack straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	YES YES YES		5802.MCA.2X10.C27 5802.MCA.2X10.C37 5802.MCA.2X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO NO NO		5954.MCA.2X10.C27 5954.MCA.2X10.C37 5954.MCA.2X10.C57	Bulk	7 = Sn
	4	PLUG Cable mount plug straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 7 mm YES: 7 mm YES: 7 mm	5803.MCA.1X10.C27 5803.MCA.1X10.C37 5803.MCA.1X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO: - NO: - NO: -		5953.MCA.1X10.C27 5953.MCA.1X10.C37 5953.MCA.1X10.C57	Bulk	7 = Sn
	2	JACK Cable mount jack straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	YES YES YES		5801.MCA.2X10.C27 5801.MCA.2X10.C37 5801.MCA.2X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO NO NO		5769.MCA.2X10.C27 5769.MCA.2X10.C37 5769.MCA.2X10.C57	Bulk	7 = Sn
	2	PLUG Cable mount plug straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 7 mm YES: 7 mm YES: 7 mm	5800.MCA.1X10.X27 5800.MCA.1X10.X37 5800.MCA.1X10.X57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO: - NO: - NO: -		5768.MCA.1X10.C27 5768.MCA.1X10.C37 5768.MCA.1X10.C57	Bulk	7 = Sn
	1	JACK Cable mount jack straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	YES YES YES		5767.MCA.2X10.C27 5767.MCA.2X10.C37 5767.MCA.2X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO NO NO		5799.MCA.2X10.C27 5799.MCA.2X10.C37 5799.MCA.2X10.C57	Bulk	7 = Sn
	1	PLUG Cable mount plug straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 7 mm YES: 7 mm YES: 7 mm	5798.MCA.1X10.C27 5798.MCA.1X10.C37 5798.MCA.1X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO: - NO: - NO: -		5766.MCA.1X10.C27 5766.MCA.1X10.C37 5766.MCA.1X10.C57	Bulk	7 = Sn

CABLE TYPES



MCAH® Product portfolio

	Picture	Pole	Description	Locking Position	Type	Style	Part number (P/N)	Packaging	Plating
HEADER TYPES		4	PLUG PCB mount angle plug 4-pole	12:00	angle	-	5600.MCAH.1X20.007	Tape and reel packaging	7 = Sn
			PLUG PCB mount plug 4-pole	12:00	straight	-	5601.MCAH.1X10.007	Tape and reel packaging	7 = Sn
		2	PLUG PCB mount angle plug 2-pole	12:00	angle	-	5711.MCAH.1X20.007	Tape and reel packaging	7 = Sn
		1	PLUG PCB mount angle plug 1-pole	12:00	angle	-	5710.MCAH.1X20.007	Tape and reel packaging	7 = Sn



MCAH® Product portfolio

Picture	Pole	Description	Cable type	CPA	Clipslot	Part number (P/N)	Packaging	Plating
	4	JACK	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	YES YES YES		5794.MCAH.2X10.C27 5794.MCAH.2X10.C37 5794.MCAH.2X10.C57	Bulk	7 = Sn
		Cable mount jack straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO NO NO		5628.MCAH.2X10.C27 5628.MCAH.2X10.C37 5628.MCAH.2X10.C57	Bulk	7 = Sn
	4	PLUG Cable mount plug straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 7mm YES: 7mm YES: 7mm	5795.MCAH.1X10.C27 5795.MCAH.1X10.C37 5795.MCAH.1X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 11mm YES: 11mm YES: 11mm	5796.MCAH.1X10.C27 5796.MCAH.1X10.C37 5796.MCAH.1X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		NO: - NO: - NO: -	5629.MCAH.1X10.C27 5629.MCAH.1X10.C37 5629.MCAH.1X10.C57	Bulk	7 = Sn
	2	JACK	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	YES YES YES		5791.MCAH.2X10.C27 5791.MCAH.2X10.C37 5791.MCAH.2X10.C57	Bulk	7 = Sn
		Cable mount jack straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO NO NO		5773.MCAH.2X10.C27 5773.MCAH.2X10.C37 5773.MCAH.2X10.C57	Bulk	7 = Sn
	2	PLUG Cable mount plug straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 7mm YES: 7mm YES: 7mm	5792.MCAH.1X10.C27 5792.MCAH.1X10.C37 5792.MCAH.1X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		NO: - NO: - NO: -	5772.MCAH.1X10.C27 5772.MCAH.1X10.C37 5772.MCAH.1X10.C57	Bulk	7 = Sn
	1	JACK	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	YES YES YES		5789.MCAH.2X10.C27 5789.MCAH.2X10.C37 5789.MCAH.2X10.C57	Bulk	7 = Sn
		Cable mount jack straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044	NO NO NO		5771.MCAH.2X10.C27 5771.MCAH.2X10.C37 5771.MCAH.2X10.C57	Bulk	7 = Sn
	1	PLUG Cable mount plug straight	RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		YES: 7mm YES: 7mm YES: 7mm	5790.MCAH.1X10.C27 5790.MCAH.1X10.C37 5790.MCAH.1X10.C57	Bulk	7 = Sn
			RG174 LL (LL-Low Loss) RTK031 / Dacar302/ LL3,2 RTK044		NO: - NO: - NO: -	5770.MCAH.1X10.C27 5770.MCAH.1X10.C37 5770.MCAH.1X10.C57	Bulk	7 = Sn

Coding

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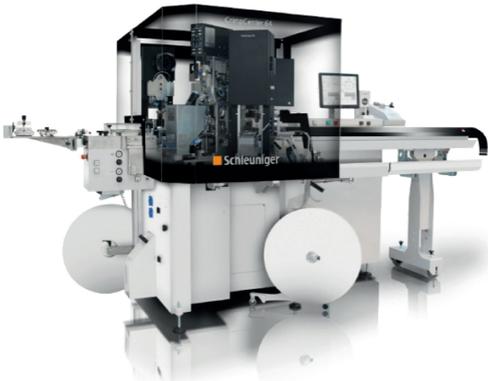




FAST, FLEXIBLE AND PRECISE PROCESS

High quality & efficiency assurance through automation

Cable assembly begins with your needs and ends with our high quality standards: Everything comes from a single source, from prototyping to pre-series to series production. A large selection of coaxial RF cable assemblies as well as strands, wires and cable tree assemblies are available for your individual needs. Our worldwide locations enable cost-efficient solutions, from manual to semi-automatic to fully automatic production. We´re always pleased to find innovative solutions to your needs and requirements. Whether solutions for explosive protection, tightness solutions from moulding technology and adhesives or sealing solutions for water, dust and helium as well as robust overmoulding solutions: We will find the right one for you!



IMS CONNECTOR SYSTEMS – WORLDWIDE



IMS CS GmbH | Löffingen, Germany



IMS CS Inc. | United States

Thanks to subsidiaries and distribution partners worldwide, IMS Connector Systems offers a fast and optimum support to its global customers.

IMS CS, headquartered in Germany, maintains its global footprint through production facilities in Europe and Asia, as well as sales offices and channel partners throughout the world.

- Headquarters
- Production plants
- Sales subsidiaries





IMS CS Kft. | Sopron, Hungary

IMS CONNECTOR SYSTEMS



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