

MXP18 – 18 Gbps multicoax solution

Key features

- Operating range at up to 18 Gbps/18 GHz
- Standard absolute phase matching down to ± 2 ps
- Highest density – lowest loss
- Slide-on mounting – no threading
- Highly flexible and ultra stable Multiflex cable
- Extensive technical support

Benefits

• Space saving

Due to the dense interface pitch, the PCB connectors take up less space on boards. This is advantageous, as expensive high-performance board material is essential for good signal integrity at high data rates.

• Shorter transmission lines

The compact design of the PCB connector allows it to be positioned directly adjacent to the DUT/chip. This helps to keep the transmission lines on the board short and the losses low.

• Reliable push-on mating

Thanks to the revolutionary slide-on interface design, assemblies can be replugged quickly and easily, while guaranteeing stable electrical values even after numerous mating cycles.

• Overall cost savings and service benefits

Reduced cost of ownership compared to single interfaces thanks to lower outlay for PCB population and channel handling. 3D files, modelling data and customised footprints are free of charge.

Comprehensive range of standard products (1 × 8 and 2 × 8 ganged systems)

- 1 × 8 and 2 × 8 breakout assemblies MXP-to-SMA
- Standardised SUCOFLEX assembly lengths with different classes of phase matching

MXP18 – technical data

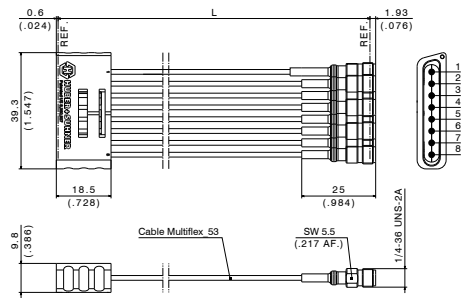
Typical electrical data	Testing condition	Performance
Operating range/ data rate		up to 18 Gbps
Frequency range		DC to 18 GHz
Impedance		50 Ω
Return loss	mated condition gated measurement: cable connector/ PCB transition PCB: Rogers RO3003 cable: HUBER+SUHNER Multiflex 53-02	≥ 20 dB up to 18 GHz
Insertion loss	Multiflex 53-02	
Cross-talk	at PCB transition	≤ -40 dB at 18 GHz

Typical mechanical data	Testing condition	Requirements
Mating force (per single channel)		max. 3.4 N (typical 1.1 N)
Demating force (per single channel)		max. 3.4 N (typical 1.1 N)
Durability (matings)	MIL-PRF-39012, paragraph 4.7.12	> 500

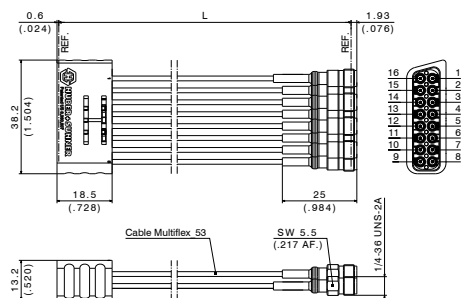
Material data cable connector	Material	Coating
Center contact	copper beryllium	SUCOPRO® gold plating
Outer contact	brass	SUCOPRO® gold plating
Insulator	PTFE	n/a
Body	aluminium	green anodised

Typical environmental data	Testing condition	Requirements
Temperature range		-55 to +85 °C
Thermal aging (mated condition)	IEC 60068-2-2, test B	120 °C/260 h
Change of temperature	IEC 60068-2-14, test na	assembly: -55 to +85 °C PCB: -55 to +85 °C
Vibration	IEC 60068-2-6	on request
Mechanical shock (transport)	MIL-STD-202, method 213, condition I	100 g/6 ms
Damp heat steady state	IEC 60068-2-78, test ca	40 °C/humidity 93%/96 h

MXP18 - breakout to SMA



Type 1 × 8 ganged	Item no.	Length	Notes
MF53/1x8A_21MXP/21SMA/152	85014420	152 mm (6")	



Type 2 × 8 ganged	Item no.	Length	Notes
MF53/2x8A_21MXP/21SMA/152	85022735	152 mm (6")	