

## TECHNICAL DATA

ELECTRICAL DATA	CECC 22000	TEST REQUIREMENTS
Impedance		50 $\Omega$
Frequency range		DC ... 6 GHz
VSWR (mated pair) - up to 4 GHz - 4 up to 6 GHz	4.4.1	(typical values) $\leq 1.15$ $\leq 1.40$ for cable connectors, see table below
RF leakage (measured at 1 GHz) - connectors for flexible cables - connectors for semi-rigid cables	4.4.8	$\geq 60$ dB $\geq 70$ dB
Dielectric withstanding voltage (at sea level)	4.4.5	500 V rms, 50 Hz
Working voltage (at sea level)		$\leq 170$ V rms, 50 Hz
Insulation resistance	4.4.4	$\geq 10^3$ M $\Omega$ / $\geq 500$ M $\Omega$ <sup>1)</sup>
Contact resistance - centre contact - outer contact	4.4.2 4.4.3	$\leq 5.0$ m $\Omega$ / $\leq 10$ m $\Omega$ <sup>1)</sup> $\leq 2.5$ m $\Omega$ / $\leq 5$ m $\Omega$ <sup>1)</sup>

TYPICAL VSWR	FREQUENCY RANGE			CABLE GROUP
	1 GHZ	2.5 GHZ	6 GHZ	
straight connectors	1.03	1.08	1.12	Y3, Y11
	1.04	1.08	1.12	U1
right angle connectors	1.03	1.08	1.13	Y3, Y11
	1.07	1.12	1.25	U1

Other connectors and cables on request

MECHANICAL DATA	CECC 22000	TEST REQUIREMENTS
Engagement force	4.5.4	$\leq 15$ N / <i>3.4 lbs</i>
Disengagement force	4.5.4	6 N ... 15 N / <i>1.4 lbs ... 3.4 lbs</i>
Contact captivation	4.5.2	$\geq 10$ N / <i>2.3 lbs</i>
Cable retention forces <sup>2)</sup>	4.5.5	<a href="#">CLICK HERE</a>
Durability (matings)	4.7.1	$\geq 500$

1) valid for MMCX "Cube"-connectors only.

2) value considers maximum load of the cables without irreversible variations of specifications.

ENVIRONMENTAL DATA	CECC 22000 TEST CONDITIONS	EQUIVALENT MIL TEST CONDITIONS
Temperature range		- 55°C ... + 155°C / - 67°F ... + 311°F
Climatic category acc. to IEC	4.6.5 → 55 / 155 / 21	
Thermal shock	4.6.7 → IEC 68-2-14 Na	MIL-STD-202, Method 107, Condition F
Moisture resistance	4.6.6 → IEC 68-2-3 Ca	MIL-STD-202, Method 106
Corrosion	4.6.10 → IEC 68-2-11 Ka	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	4.6.3 → IEC 68-2-6 Fc	MIL-STD-202, Method 204, Condition C

ENVIRONMENTAL DATA FOR CUBE-CONNECTORS ONLY	CECC 22000 TEST CONDITIONS	EQUIVALENT MIL TEST CONDITIONS
Temperature range		- 40°C ... + 90°C / - 40°F ... + 194°F
Climatic class acc. to IEC	4.6.5 → 40 / 90 / 21	
Temperature shock	4.6.7	MIL-STD-202, Method 107, - 40°C / - 40°F and + 90°C / + 194°F, 30 min. each
Humidity	4.6.6	MIL-STD-202, Method 103, Condition B
Vibration	4.6.3	3 cycles in 3 opposite directions 10-150 Hz, 10-60 Hz: 0.75 mm / .030 in., 60-150 Hz: 10 G
Mechanical shock	4.6.4	MIL-STD-202, Method 213, Condition B

MATERIAL DATA			
CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies, Crimp ferrules	QQ-B-626	brass	SUCOPRO / gold
Centre contacts	QQ-C-530 QQ-B-626	beryllium-copper, hardened brass	SUCOPRO / gold
Insulators		PTFE or PFA	

MATERIAL DATA FOR "Cube"-CONNECTORS ONLY			
CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Leads Contact socket	ASTM-B-103 ASTM-B-103 / QQ-C-530	phosphor bronze phosphor bronze / beryllium copper	tinned tinned / gold
Outer conductor	QQ-B-626	brass	gold
Body	QQ-B-626	LCP (liquid crystal polymer) brass	gold
Insulator		LCP (liquid crystal polymer) PTFE or PFA	

PROCESSING DATA FOR "Cube"-CONNECTORS ONLY	CECC 00802	TEST
Soldering method (excluding wave soldering)	6.2 class A	7.2.4. a), cat. 1 and 3
Resistance to soldering heat	7.2.2	7.2.4. a), cat. 1
Solderability	7.2.1	7.2.4. b)
Leaching	7.2.3	7.2.4. b), 10 s
Adherent to the print - bending of PCB - shearing - pulling (vertical to PCB)	7.3.2 7.3.3	1 mm/ .040 in., 30 s 40 N/ 9.0 lbs, 10 s 60 N/ 13.5 lbs, 10 s

Some connectors may have a specification that differs from the above mentioned data.

**The products are designed and guaranteed to pass the above mentioned test procedures. Any additional or different requirement arising from specific applications or environmental conditions which is not covered by these test procedures is subject to request.**