

Förderverein für Elektrotechnische Normung (FEN) e. V.
Cenelec Electronic Components Committee

CECC



Système Harmonisé d'Assurance de la Qualité
des Composants Electroniques

SPECIFICATION PARTICULIERE:

**CONNECTEURS COAXIAUX
POUR FREQUENCE
RADIOELECTRIQUE
Série SMC**

Harmonized System of Quality Assessment for
Electronic Components

DETAIL SPECIFICATION:

**RADIO FREQUENCY
COAXIAL CONNECTORS
Series SMC**

Harmonisiertes Gütebestätigungssystem für
Bauelemente der Elektronik

BAUARTSPEZIFIKATION:

**HOCHFREQUENZ-
KOAXIAL-STECKVERBINDER
Serie SMC**

1

Edition
Issue
Ausgabe

CECC 22141-802

1988

Cette page bleue doit être insérée après la page de garde de la CECC 22 141-802 Edition 1 (1988)

AMENDEMENT 1 A LA CECC 22 141-802, (Edition 1)

SPECIFICATION PARTICULIERE:

CONNECTEURS COAXIAUX POUR FREQUENCE RADIOELECTRIQUE
SERIE SMC

La modification suivante doit être effectuée:

Il est autorisé d'utiliser une rondelle frein à denture intérieure à la place d'une rondelle ondulée, dans la mesure où leur diamètre extérieur indiqué est conservé.

On distinguera dans les commandes et le stockage les variantes de la manière suivante: codes -01, -02, -03 etc. pour les rondelles ondulées, codes -11, -12, -13 etc. pour les rondelles frein à denture intérieure.

Enregistrer les modifications sur la feuille jaime 'Enregistrement de modifications'.

Cette proposition a été communiquée aux membres du GT22 sous la référence GT22(Secrétariat)655.

CECC 22 141-802 Edition 1 Amendement 1 1991

This blue page shall be inserted after the title page of CECC 22 141-802 Issue 1 (1988)

AMENDMENT 1 TO CECC 22 141-802, (Issue 1)

DETAIL SPECIFICATION:

RADIO FREQUENCY COAXIAL CONNECTORS SERIES SMC

The following amendment shall be made:

The use of an internal toothed lockwasher is permitted as an alternative to the crinkle washer indicated provided it does not exceed the outside diameter shown.

To allow discrimination in ordering and stocking, the Variant Codes -01, -02, -03 etc. will continue to be used for connectors fitted with crinkle washers. The corresponding connectors with toothed lockwashers will use Variant Codes -11, -12, -13 etc.

Enter this amendment on the yellow 'Record of Amendments' sheet.

This proposal was circulated to WG22 members under WG22(Secretariat)655.

CECC 22 141-802 Issue 1 Amendment 1 1991

Dieses blaue Blatt ist nach dem Titelblatt der CECC 22 141-802 Ausgabe 1 (1988) einzusetzen

ÄNDERUNG 1 ZU CECC 22 141-802, (Ausgabe 1)

BAUARTSPEZIFIKATION:

HOCHFREQUENZ-KOAXIAL-STECKERBINDER SERIE SMC

Die folgende Änderung ist vorzunehmen:

Der Gebrauch einer innen gezahnten Sicherungsscheibe ist als Alternative zur Federscheibe zulässig, wenn diese dem angegebenen Außendurchmesser nicht überschreitet.

Zur Unterscheidung bei der Bestellung und der Lagerung wird für Steckverbinder, die mit Federscheiben eingesetzt werden, der Variantencode -01, -02, -03 etc. weiterverwendet. Für die entsprechenden Steckverbinder mit gezahnten Sicherungsscheiben lauten die Variantencodes -11, -12, -13 etc.

Die Änderung ist in das gelbe Blatt der Änderungsliste einzutragen.

Dieser Vorschlag wurde mit dem Schreiben WG22(Sekretariat)655 den WG22-Mitgliedern zur Kenntnis gebracht.

CECC 22 141-802 Ausgabe 1 Änderung 1 1991

Information about the System may be obtained from:



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and
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Telex 4-12871 vdetz d
Telefax Int.+ (49) 69 6 30 82 83 (Gr. 2/3)
or from the National Authorized Institutions
of the participating countries listed
who can supply copies of:

- 1 The Internal Regulations of the FEN e.V.
- 2 CECC Specifications of the FEN and National Specifications for the System
- 3 CECC 00 200: Qualified Products List (QPL)
- 4 CECC 00 300: CECC Publications and their related national documents

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Österreichischer Verband
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Eschenbachgasse 9
A-1010 Vienna

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Comité Electrotechnique Belge
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Strandgade 36
DK-1401 Copenhagen K

Finland

Finnish Electrotechnical
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EOLAS- The Irish Science and
Technology Agency
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IRL-Dublin 9

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Viale Monza, 259
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PREFACE

This detail specification (DS) was prepared by CECC Working Group 22: "RF Connectors".

It relates to Series SMC connectors covered by sectional specification CECC 22 140 and by blank detail specification CECC 22 141. These in turn are related to the generic specification CECC 22 000.

It is based, wherever possible, on the Publications of the International Electro-technical Commission, and in particular on IEC 169-9 (1978) Part 9: R.F. coaxial connectors with inner diameter of outer conductor 3 mm (0,12 in) with screw coupling - Characteristic impedance 50 ohms (Type SMC).

The text of this detail specification was circulated to the members of CECC WG 22 and was approved for publication under the accelerated procedure for the acceptance of detail specifications in accordance with Decision 10 of the minutes of the CECC CD in document (Secretariat)1838.

Document

WG22(Secretariat)377

Approval Date

January 1986

CECC 22 141-802 Issue 1

[1]	page 1 of 9	[2] CECC 22 141 - 802	
ELECTRONIC COMPONENT OF ASSESSED [3] QUALITY IN ACCORDANCE WITH GENERIC SPECIFICATION 22 000 SECTIONAL SPECIFICATION 22 140	[4]	Issue 1	

[5] DETAIL SPECIFICATION for

RADIO FREQUENCY COAXIAL CONNECTOR OF ASSESSED QUALITY:

SERIES

SMCStyle: Fixed socket, single hole front mounting,
solder bucket, male centre contact

Special Features & Markings:

Method of cable/wire* attachment: centre conductor - solder/crimp*

: outer conductor - solder/clamp/crimp*

Mass: 1,5g (Max.)

*Delete as appropriate

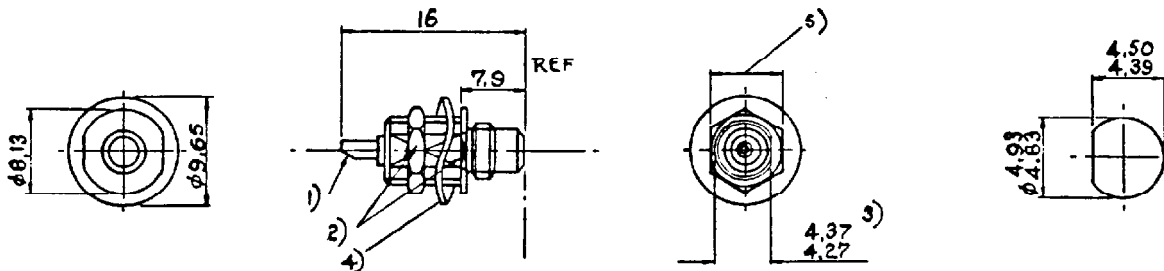
[6] Assessment level : H

Characteristic Impedance 50 Ω Climatic category 55/155/21

[7] Outline and maximum dimensions

All dimensions in mm

Panel piercing and mounting details



- NOTES : 1 Solder bucket to accommodate at least one conductor 0,74 mm dia. for a depth of 2 mm min.
Orientation of bucket optional.
2 Width across flats 6,35 (6 permissible)
3 to 'D' flat
4 Crinkle washer

For mating interface dimensions and position of reference plane see CECC 22 140

Maximum panel thickness: for front mounting 2,40..... mm, ~~for rear mounting mm~~

The outline dimensions meet the requirements of IEC 169-9

[8] Variants

Variant No.	Description of Variant	Relevant Cables		
		IEC 96	RG	National Cables
Body Shell Finish				
Au	Non-tarnish			
Plating				
-01	-02			
.....				
.....				
.....				
.....				

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200: Qualified Products List.

[9] PERFORMANCE (including limiting conditions of use)

RATINGS AND CHARACTERISTICS		CECC 22 140 CLAUSE	VALUE	REMARKS
ELECTRICAL				
Reflection factor	Variant No./ Designation			Measurement freq. range
	-01.....-02	4.4.1	NA.....	...Unmatched style...
				
				
				
				
				
				
				
Centre contact resistance		4.4.2	$\leq$ 5.... m Ω $\leq$...15.... m Ω	Initial After conditioning
Outer conductor continuity		4.4.3	$\leq$...2,5... m Ω $\leq$...7,5... m Ω	Initial After conditioning
Insulation resistance		4.4.4	$\geq$ 1.... G Ω $\geq$...500... M Ω	Initial After conditioning
+ Proof voltage at sea level	-01.....-02	4.4.5	1.... kV	86 to 106 kPa
				
				
				
				
				
				
				
				
+ Proof voltage at 20 km altitude	-01.....-02	4.6.5	100.... V	4,4 kPa
				
				
				
				
				
				
				
				

+ Voltage values are r.m.s. values of a.c. at 50 to 60 Hz unless otherwise stated.

RATINGS AND CHARACTERISTICS		CECC 22 140 CLAUSE	VALUE	REMARKS
ELECTRICAL				
	Variant No./ Designation			
+ Working voltage at sea level	-01.....-02		335.... V	86 to 106 kPa
+ Working voltage at 20 km altitude	-01.....-02		85.... V	4,4 kPa
Screening effectiveness	-01.....-02	4.4.8	$Z_t \leq \dots NA \dots \Omega$	Providing $\geq$ dB
ADDITIONAL ELECTRICAL CHARACTERISTICS				
MECHANICAL				
Contact captivation: - axial force - torque		4.5.2	4..... N NA..... Nm	CECC 22 000 method (or as specified)

+ Voltage values are r.m.s. values of a.c. at 50 to 60 Hz unless otherwise stated.

RATINGS AND CHARACTERISTICS		CECC 22 140 CLAUSE	VALUE	REMARKS
MECHANICAL				
Engagement and separation torque		4.5.4	..NA.. Nm max.	(to overcome friction of coupling nut)
Effectiveness of clamping device against cable pulling	Variant No./ Designation -01.....-02	4.5.5 (1)	NA..... N	
Effectiveness of clamping device against cable torsion	-01.....-02	4.5.5 (2)	NA.... Nm	
Tensile strength of coupling mechanism		4.5.6	NA N	
Coupling torque				
- normal			NA .. Nm	
- proof			NA.... Nm	
Bending moment		4.5.9	0,8.... Nm	Relative to reference plane
ADDITIONAL MECHANICAL CHARACTERISTICS				