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CAPACITOR FILTERS, C-TYPE, FEEDTHROUGH, ELECTROMAGNETIC INTERFERENCE SUPPRESSION, HERMETICALLY SEALED, BASED ON TYPE SFC100 ESCC Detail Specification No. 3008/027

ISSUE 1 October 2002





ESCC Detail Specification

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CAPACITOR FILTERS, C-TYPE, FEEDTHROUGH, ELECTROMAGNETIC INTERFERENCE SUPPRESSION, HERMETICALLY SEALED, BASED ON TYPE SFC100

ESA/SCC Detail Specification No. 3008/027



space components coordination group

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Issue/Rev.		SCCG Chairman	ESA Director General or his Deputy	
Issue 1	June 1996	Sa milt	Hove	
Revision 'A'	April 1997	Sa mill	Com	



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DOCUMENTATION CHANGE NOTICE

Rev. Letter	Rev. Date	Reference	CHANGE Item	Approved DCR No.
'A'	Apr. '97	P1. Cover page P2. DCN P6. Table 1(a) P9. Para. 4.2.5 P18. Table 6	: Under 10MHz, values for 470000, 680000, 1000000pF corrected : Deviation "(b)" added : Deviation "(b)" added : No. 13, Insertion Loss deleted	None None 221384 221384 221384 221384



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1. **GENERAL**

1.1 SCOPE

This specification details the ratings, physical and electrical characteristics, test and inspection data for a Capacitor Filter, C-Type, Feedthrough, Electromagnetic Interference Suppression, Hermetically Sealed, based on Type SFC100. It shall be read in conjunction with ESA/SCC Generic Specification No. 3008, the requirements of which are supplemented herein.

1.2 COMPONENT TYPE VARIANTS AND RANGE OF COMPONENTS

Variants of the basic type capacitor filters and the range of components covered by this specification, are given in Table 1(a).

1.3 MAXIMUM RATINGS

The maximum ratings, which shall not be exceeded at any time during use or storage, applicable to the capacitor filters specified herein, are as scheduled in Table 1(b).

1.4 PARAMETER DERATING INFORMATION

The parameter derating information applicable to the capacitor filters specified herein, is shown in Figure 1.

1.5 PHYSICAL DIMENSIONS

The physical dimensions of the capacitor filters specified herein, are shown in Figure 2.

1.6 FUNCTIONAL DIAGRAM

The functional diagram, showing lead identification, of the capacitor filters specified herein, is shown in Figure 3.

2. APPLICABLE DOCUMENTS

The following documents form part of this specification and shall be read in conjunction with it:

- (a) ESA/SCC Generic Specification No. 3008 for Capacitors and Capacitor Filters, Feedthrough.
- (b) MIL-STD-202, Test Methods for Electronic and Electrical Component Parts.

3. TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS

For the purpose of this specification, the terms, definitions, abbreviations, symbols and units specified in ESA/SCC Basic Specification No. 21300 shall apply. In addition, the following abbreviations are used:-

V_T = Test Voltage.



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TABLE 1(a) - TYPE VARIANTS AND RANGE OF COMPONENTS

(1) Variant (Notes 1 and 2)	Rated \ U _R		(3) Capacitance Range	(4) Voltage Proof VP	(5) Voltage Drop V _{dr}	d.c. Resistance Rs	(7) Rated Current
and 2)	(a) - 55°C/ + 85°C	(b) + 85°C/ + 125°C	(pF) (±20%) (E6 Series)	(V)	Vdr (V)	(m Ω)	I _R (A)
01, 04	50	25	1 000 to 10 ⁶	125	0.1	10	10
02, 05	100	75	1 000 to 330 000	250	0.1	10	10
03, 06	200	150	1 000 to 150 000	500	0.1	10	10

NOTES

- 1. See Insertion Loss requirements in the following Table.
- 2. See the Table below and Figure 2 for physical characteristics.

VARIANT	CASE THREAD E
01 to 03	U: 12-32 UNEF
04 to 06	I: M6×0.75

INSERTION LOSS VALUES ACCORDING TO THE CAPACITANCE VALUE

(8) Capacitance	Insertion Loss (I _L) (dB)					
(pF) (E6 Series)	100kHz	1.0MHz	10MHz	100MHz	1.0GHz	10GHz
1 000	-	-	-	21	41	61
1 500	-	-	-	24	44	64
2 200	-	-	-	27	48	68
3 300	-	-	11	31	52	70
4 700	-	-	14	34	54	70
6 800	-	-	17	37	57	70
10 000	-	-	21	41	61	70
15 000	-	-	25	45	65	70
22 000	-	8	28	48	68	70
33 000	-	11	31	51	70	-
47 000	-	14	34	48	70	-
68 000	-	17	33	45	70	-
100 000	-	21	41	50	70	-
150 000	<u>.</u>	25	45	52	70	-
220 000	8	28	48	65	70	-
330 000	11	31	51	70	70	-
470 000	15	35	53	70	-	
680 000	18	38	55	70	-	-
1 000 000	21	41	55	70	•	-



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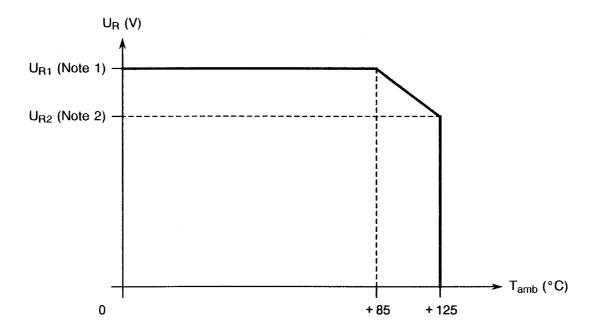
TABLE 1(b) - MAXIMUM RATINGS

No.	Characteristic	Symbol	Maximum Ratings	Unit	Remarks
1	Rated d.c. Voltage	U _R	See Table 1(a) Column 2	٧	Notes 1 and 2
2	Voltage Drop	V _{dr}	100	mV	
3	d.c. Resistance	Rs	. 10	mΩ	
4	Rated Current	lR.	10	Α Α	Note 3
5	Torque	T _{qe}	0.8	Nm	
6	Operating Temperature Range	T _{op}	- 55 to + 125	۰C	T _{amb}
7	Storage Temperature Range	T _{stg}	- 55 to + 125	°C	
8	Soldering Temperature	T _{sol}	+ 260	°C	Note 4

NOTES

- At T_{amb}≤ +85°C. For derating at T_{amb}> +85°C, see Figure 1.
 The addition of d.c. applied voltage and ripple voltage shall never exceed the rated d.c. voltage.
- 3. d.c. and low frequency.
- 4. Duration 10 seconds maximum at a distance of not less than 2.0mm from the device body and the same lead shall not be resoldered until 3 minutes have elapsed.

FIGURE 1 - PARAMETER DERATING INFORMATION



Rated Voltage versus Temperature

NOTES

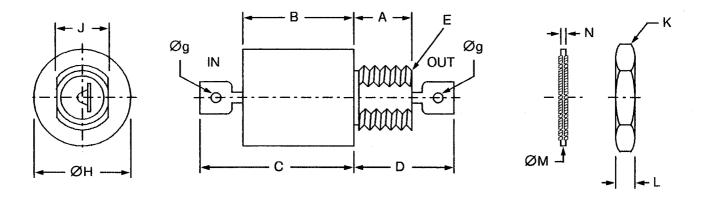
- 1. See U_{R1} Voltage value for each variant on Table 1(a), Column 2(a).
- 2. See U_{R2} Voltage value for each variant on Table 1(a), Column 2(b).



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FIGURE 2 - PHYSICAL DIMENSIONS

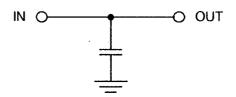


	Variants 01 to 03		Variants 04 to 06			
Symbol	Millimetres		Millimetres		Notes	
	Min.	Мах.	Min.	Max.		
Α	5.10	5.20	5.10	5.20		
В	4.50	5.30	4.50	5.30	1	
С	7.00	9.30	7.00	9.30	1, 2	
D	7.00	9.00	7.00	9.00	1, 2	
E	See Ta	ble 1(a)	See Table 1(a)		Thread	
Øg	1.9	50	1.50			
ØH	9.70	9.90	9.70	9.90		
J	4.90	5.10	4.90	5.10		
K	8.00 NOM.		8.00 NOM.		Across flats	
L	2.50 NOM.		2.50 NOM.			
ØМ	10.20 NOM.		9.40 NOM.		3	
N	0.60	NOM.	0.40 NOM.		3	

NOTES

- 1. Lead finish shall commence not more than 1.5mm from encapsulant.
- 2. The terminals are defined as rigid.
- 3. Internal fan lockwasher.

FIGURE 3 - FUNCTIONAL DIAGRAM





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4. **REQUIREMENTS**

4.1 GENERAL

The complete requirements for procurement of the components specified herein are stated in this specification and ESA/SCC Generic Specification No. 3008 for Capacitors and Capacitor Filters, Feedthrough. Deviations from the Generic Specification, applicable to this specification only, are detailed in Para. 4.2.

Deviations from the applicable Generic Specification and this Detail Specification, formally agreed with specific Manufacturers on the basis that the alternative requirements are equivalent to the ESA/SCC requirements and do not affect the components' reliability, are listed in the appendices attached to this specification.

4.2 DEVIATIONS FROM GENERIC SPECIFICATION

4.2.1 Deviations from Special In-process Controls

None.

4.2.2 Deviations from Final Production Tests (Chart II)

(a) Para. 9.7, External Visual Inspection: For variants with a silver plated case, a change of shade is acceptable.

4.2.3 Deviations from Burn-in and Electrical Measurements (Chart III)

(a) Para. 9.7, External Visual Inspection: For variants with a silver plated case, a change of shade is acceptable.

4.2.4 Deviations from Qualification Tests (Chart IV)

- (a) Para. 9.7, External Visual Inspection: For variants with a silver plated case, a change of shade is acceptable.
- (b) Para. 9.19, Operating Life: At intermediate and final measurements, Insertion Loss shall not be performed.

4.2.5 Deviations from Lot Acceptance Tests (Chart V)

- (a) Para. 9.7, External Visual Inspection: For variants with a silver plated case, a change of shade is acceptable.
- (b) Para. 9.19, Operating Life: At intermediate and final measurements, Insertion Loss shall not be performed.

4.3 MECHANICAL REQUIREMENTS

4.3.1 Dimension Check

The dimensions of the components specified herein shall be verified in accordance with the requirements set out in Para. 9.5 of ESA/SCC Generic Specification No. 3008 and they shall conform to those shown in Figure 2 of this specification.

4.3.2 <u>Weight</u>

The maximum weight of the components specified herein shall be 7.0 grammes.

4.3.3 Robustness of Terminations

The requirements for the robustness of terminations tests are specified in Section 9 of ESA/SCC Generic Specification No. 3008. The leads are defined as "Rigid".

Test Ua1, Tensile : The load shall be 20N.



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4.3.4 Solderability

The requirements for solderability testing are specified in Section 9 of ESA/SCC Generic Specification No. 3008.

Test Method 1 shall apply and a thermal screen of 1.6mm may be used. The terminal shall be immersed up to the terminal slot which shall be fully filled.

4.3.5 Seal Test

The requirements for seal testing are specified in Section 9 of ESA/SCC Generic Specification No. 3008.

The limit for fine leak shall be 5.10⁻³ Pa.cm³/s [5.10⁻⁸ bar.cm³/s].

4.4 MATERIALS AND FINISHES

The materials and finishes shall be as specified herein. Where a definite material is not specified, a material which will enable the components specified herein to meet the performance requirements of this specification shall be used. Acceptance or approval of any constituent material does not guarantee acceptance of the finished product.

4.4.1 Case

The case shall be silver plated brass and hermetically sealed with hard glass seals.

4.4.2 Lead Material and Finish

The lead material shall be Type 'G' with Type '3 or 4' finish in accordance with the requirements of ESA/SCC Basic Specification No. 23500.

4.4.3 Accessories

: As per Figure 2, brass, silver-plated.

Lock-Washer: As per Figure 2, bronze, silver-plated.

4.5 **MARKING**

4.5.1 General

The marking of components delivered to this specification shall be in accordance with the requirements of ESA/SCC Basic Specification No. 21700 and the following paragraphs. When the component is too small to accommodate all of the marking specified, as much as space permits shall be marked and the marking information, in full, shall accompany the component in its primary package.

The information to be marked and the order of precedence, shall be as follows:-

- (a) Lead Identification.
- (b) The SCC Component Number.
- (c) Electrical Characteristics and Ratings.
- (d) Traceability Information.



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4.5.2	Lead	lder	ntification

Not applicable.

4.5.3 The SCC Component Number

The SCC Component Number shall be constituted and marked as follows:-

	<u>300802701</u> E	_
Detail Specification Number		
Type Variant (see Table 1(a))		
Testing Level (B or C, as applicable) ——		

4.5.4 <u>Electrical Characteristics and Ratings</u>

The electrical characteristics and ratings to be marked in the following order of precedence are:-

- (a) Capacitance Value.
- (b) Tolerance.
- (c) Rated Voltage.

The information shall be constituted and marked as follows:-

	<u>003 vil</u>
Capacitance Value (68nF)	
Tolerance (± 20%)	
Rated Voltage (100V)	

4.5.4.1 Capacitance Values

The capacitance values shall be expressed by means of the following codes. The unit quantity for marking shall be picofarads (pF).

Capacitance Value (pF)	Code
XX10 ¹	XX1
XX10 ²	XX2
XX10 ³	XX3
XX10 ⁴	XX4
XX10 ⁵	XX5

4.5.4.2 Tolerance

The tolerance on capacitance values shall be indicated by the code letters specified hereafter.

20	M
Tolerance (±%)	Code Letter



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4.5.4.3 Rated Voltage

The rated voltage shall be indicated by the code letters specified hereafter.

Rated Voltage (U _R) (V)	Code Letter
50	С
100	Е
200	G

4.5.5 Traceability Information

Each component shall be marked in respect of traceability information in accordance with the requirements of ESA/SCC Basic Specification No. 21700.

4.6 <u>ELECTRICAL MEASUREMENTS</u>

4.6.1 <u>Electrical Measurements at Room Temperature</u>

The parameters to be measured at room temperature are scheduled in Table 2. Unless otherwise specified, measurements shall be performed at T_{amb} = +22 ±3 °C.

4.6.2 Electrical Measurements at High and Low Temperatures

The parameters to be measured at high and low temperatures are scheduled in Table 3. Measurements shall be performed at $T_{amb} = 125(+0-5)$ °C and -55(+5-0) °C respectively.

4.6.3 <u>Circuits for Electrical Measurements (Figure 4)</u>

Not applicable.

4.7 BURN-IN TESTS

4.7.1 Parameter Drift Values

The parameter drift values applicable to burn-in are as specified in Table 4 of this specification. Unless otherwise stated, measurements shall be performed at T_{amb} = +22 ±3 °C. The parameter drift values (Δ) applicable to the parameters scheduled shall not be exceeded. In addition to these drift value requirements for a given parameter, the appropriate limit values specified in Table 2 shall not be exceeded.

4.7.2 Conditions for Burn-in

The requirements for burn-in are specified in Section 7 of ESA/SCC Generic Specification No. 3008. The conditions for burn-in shall be as specified in Table 5(a) of this specification.

4.7.3 Electrical Circuit for Burn-in (Figure 5)

Not applicable.



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TABLE 2 - ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE - d.c. PARAMETERS

No	No. Characteristics Symbol		ESA/SCC 3008	Test	Lin	Unit	
140.			Test Method	Conditions	Min	Max	Offic
1	Voltage Drop	V _{dr}	Para. 9.4.1.5	I _R = 10A	-	0.1	٧
2	Voltage Proof	VP	Para. 9.4.1.2	V = 2.5U _R	Note 1	-	٧
3	Insulation Resistance	Ri Ri×C	Para. 9.4.1.3	C≤25nF C>25nF	10 ⁴ 250	-	MΩ sec

NOTES

1. See Column 4 of Table 1(a).

TABLE 2 - ELECTRICAL MEASUREMENTS AT ROOM TEMPERATURE - a.c. PARAMETERS

No.	Characteristics	Characteristics Symbol ESA/5	ESA/SCC 3008	SA/SCC 3008 Test	Lin	Lloib	
INO.	Ondiacteristics	Symbol	Test Method	Conditions	Min	Max	Unit
4	Insertion Loss	l _{L1}	Para. 9.4.1.4	f = 100kHz Note 1	Note 2	-	dB
5	Insertion Loss	l _{L2}	Para. 9.4.1.4	f = 1.0MHz Note 3	Note 2	-	dB
6	Insertion Loss	I _{L3}	Para. 9.4.1.4	f = 10MHz Note 3	Note 2	-	dB
7	Insertion Loss	l _{L4}	Para. 9.4.1.4	f = 100MHz Note 3	Note 2	-	dB
8	Insertion Loss	l _{L5}	Para. 9.4.1.4	f = 1.0GHz Note 3	Note 2	-	dB
9	Insertion Loss	l _{L6}	Para. 9.4.1.4	f = 10GHz Note 1	Note 2	-	dB
10	Capacitance	С	Para. 9.4.1.1	Para. 9.4.1.1	Note 4	•	pF

NOTES

- 1. Measurements at this frequency to be made only during Chart IV testing.
- 2. See Column 9 of Table 1(a).
- 3. Measurements at rated current to be made only during Chart IV testing in Subgroups II or III. Measurements without load current to be made during Charts II, III and V.
- 4. See Column 3 of Table 1(a).



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TABLE 3 - ELECTRICAL MEASUREMENTS AT HIGH AND LOW TEMPERATURES

Nia	C. walk al	ESA/SCC 3008	Test Conditions	Lin	Unit		
No.	Characteristics	Symbol	Test Method	(Note 1)	Min	Max	Oiiit
3	Insulation Resistance	Ri Ri×C	Para. 9.4.1.3	C≤25nF C>25nF Note 2	10 ³ 25	-	MΩ sec
10	Capacitance Change	<u>ΔC</u> C	Para. 9.4.1.1	Para. 9.4.1.1	- 20	+20	% (3)

NOTES

- 1. If more than 20 units have to be measured, the measurement shall be performed on a sample basis in accordance with Inspection Level I, Table IIA, AQL = 1.0% of IEC Publication No. 410.
- 2. Insulation resistance is to be performed only at high temperature.
- 3. Relative to the value measured in Table 2.



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FIGURE 4 - CIRCUITS FOR ELECTRICAL MEASUREMENTS

Not applicable.

TABLE 4 - PARAMETER DRIFT VALUES

No.	Characteristics	Symbol	Spec. and/or Test Method	Test Conditions	Change Limits (Δ)	Unit
10	Capacitance Change	<u>ΔC</u> C	As per Table 2	As per Table 2	± 10	%

TABLE 5(a) - CONDITIONS FOR BURN-IN TESTS

No.	Characteristic	Symbol	Condition	Unit
1	Ambient Temperature	T _{amb}	+ 125(+ 0 - 3)	°C
2	Test Voltage	V _T	2×U _R at +125°C Note 1	V

NOTES

1. Applied between one terminal and the case. See Column 2(b) of Table 1(a) for value of U_R.

TABLE 5(b) - CONDITIONS FOR OPERATING LIFE TESTS

No.	Characteristic	Symbol	Condition	Unit
1	Ambient Temperature	T _{amb}	+ 125(+ 0 - 3)	°C
2	Test Voltage	V _T	2×U _R at +125°C Note 1	V
3	Rated Current	l _R	10 Note 2	Α

NOTES

- 1. Applied between one terminal and the case. See Column 2(b) of Table 1(a) for value of U_R.
- 2. To flow between the terminals.

FIGURE 5 - ELECTRICAL CIRCUIT FOR BURN-IN AND OPERATING LIFE TESTS



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4.8 <u>ENVIRONMENTAL AND ENDURANCE TESTS (CHARTS IV AND V OF ESA/SCC GENERIC SPECIFICATION No. 3008)</u>

4.8.1 <u>Measurements and Inspections on Completion of Environmental Tests</u>

The parameters to be measured and inspections to be performed on completion of environmental tests are scheduled in Table 6. Unless otherwise stated, the measurements shall be performed at $T_{amb} = +22 \pm 3$ °C.

4.8.2 <u>Measurements and Inspections at Intermediate Points During Endurance Tests</u>

The parameters to be measured and inspections to be performed at intermediate points during endurance tests are scheduled in Table 6. Unless otherwise stated, the measurements shall be performed at $T_{amb} = +22 \pm 3$ °C.

4.8.3 <u>Measurements and Inspections on Completion of Endurance Tests</u>

The parameters to be measured and inspections to be performed on completion of endurance testing are as scheduled in Table 6. Unless otherwise stated, the measurements shall be performed at T_{amb} = +22±3 °C.

4.8.4 Conditions for Operating Life Tests (Part of Endurance Testing)

The requirements for operating life test are specified in Section 9 of ESA/SCC Generic Specification No. 3008. The conditions for operating life testing shall be as specified in Table 5(b) of this specification.

4.8.5 <u>Electrical Circuit for Operating Life Tests (Figure 5)</u>

Not applicable.



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TABLE 6 - MEASUREMENTS AND INSPECTIONS ON COMPLETION OF ENVIRONMENTAL TESTS AND AT INTERMEDIATE POINTS AND ON COMPLETION OF ENDURANCE TESTING

	ESA/SCC GENERIC S	SPEC. NO. 3008	MEASUREMENTS	AND INSPECTIONS		LIMI ⁻	rs	
NO.	ENVIRONMENTAL AND ENDURANCE TESTS (1)	TEST METHOD AND CONDITIONS	IDENTIFICATION	CONDITIONS	SYMBOL	MIN.	MAX.	UNIT
01	Seal Test (Hermetically Sealed)	Para. 9.6 and Para. 4.3.5 of this spec.	Gross Leak Fine Leak	ESA/SCC No. 3008 Para. 9.6.1 ESA/SCC No. 3008 Para. 9.6.2	-	-	- -	
02	External Visual Inspection	Para. 9.7 and Paras 4.2.4 and 4.2.5 of this spec.	Final Measurements Visual Inspection	ESA/SCC No. 20500	-	-	-	
03	Temperature Rise	Para. 9.9	Temperature Rise	Rated Current (3)	-	-	25	۰C
04	Shock	Para. 9.10	Measurements during Tests	100% U _R (2) applied No Open or Short Circuits >0.1ms		<u>-</u> .	-	
			Visual Examination Insertion Loss	No Mechanical Damage Table 2 Items 4 to 9	- _L	Table 2	-	
05	Vibration	Para. 9.11	Measurements during Tests During Last Cycle	Rated Current (3) and 100% U _R (2) applied No Open or Short Circuits > 0.1ms	-	-	-	
			Final Measurements Visual Examination Insertion Loss	No Mechanical Damage Table 2 Items 4 to 9	- Լլ	- Table 2	<u>.</u>	
06	Accelerated Damp Heat	Before tests, 10 cycles of Para. 9.2 Para. 9.12	Final Measurements Visual Examination Voltage Proof	After recovery of 4 to 24 hrs No corrosion or obliteration of marking Table 2 Item 2	VP	90% U _R (2)	-	
			Insulation Resistance Insertion Loss	Table 2 Item 3 Table 2 Items 4 to 9	Ri I _L	(4) Table 2	- -	
07	Low Air Pressure	Para. 9.13	Measurements during Tests Voltage Proof	During last 5 minutes Table 2 Item 2	VP	125% U _R	-	
			Visual Examination Final Measurements Visual Examination	No breakdown, flashover, deformation or seepage No breakdown, flashover, deformation or seepage	-	-	<u>-</u>	
08	Robustness of Terminations	Para. 9.14 and Para. 4.3.3 of this spec.	Final Measurements Visual Examination Voltage Drop	No damage Table 2 Item 1	- V _{dr}	-	- Table 2	

NOTES

- 1. The tests in this Table refer to either Chart IV or V and shall be used as applicable.
- 2. For U_R, see Column 2(a) of Table 1(a).
- 3. For I_R, see Column 7 of Table 1(a).
- 4. Greater than 10% of the value given in Table 2.
- 5. Greater than 50% of the value given in Table 2.



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TABLE 6 - MEASUREMENTS AND INSPECTIONS ON COMPLETION OF ENVIRONMENTAL TESTS AND AT INTERMEDIATE POINTS AND ON COMPLETION OF ENDURANCE TESTING (CONT'D)

	ESA/SCC GENERIC S	SPEC. NO. 3008	MEASUREMENTS /	AND INSPECTIONS		LIMI	rs	
NO.	ENVIRONMENTAL AND ENDURANCE TESTS (1)	TEST METHOD AND CONDITIONS	IDENTIFICATION	CONDITIONS	SYMBOL	MIN.	MAX.	UNIT
09	Immersion	Before tests, 10 cycles of Para. 9.2 Para. 9.15	Final Measurements Visual Examination Voltage Proof Insulation Resistance	After recovery of 4 to 24 hrs No obliteration of marking and harmful corrosion Table 2 Item 2 Table 2 Item 3	- VP Ri	90% U _R (2) (4) Table 2		
10	Overload .	Para. 9.16	Final Measurements Insulation Resistance Voltage Drop Visual Examination	Table 2 Items 4 to 9 140% of Rated Current (3) for 15 mins min. Table 2 Item 3 Table 2 Item 1 No damage	Ri V _{dr}	Table 2	Table 2	
11	Resistance to Soldering Heat	Para. 9.17	Final Measurements Visual Examination Insulation Resistance Insertion Loss	After recovery of 1 to 2 hrs No damage Table 2 Item 3 Table 2 Items 4 to 9	, Ri	- Table 2 Table 2	-	
12	Solderability	Para. 9.18 and Para. 4.3.4 of this spec.	Final Measurements Visual Examination	IEC No. 68-2-20 Para. 4.6.4, 4.7.4 or 4.9.3	•	-	-	
13	Operating Life	Para. 9.19	Initial Measurements Capacitance During Tests Intermediate	Table 2 Item 10 No Open or Short Circuit	C -	Record -	values -	
			Measurements Insulation Resistance Voltage Proof	Table 3 Item 3 After 24 hrs recovery Table 2 Item 2	Ri VP	Table 3 90% U _R (2)	-	
			Insulation Resistance Capacitance Change Final Measurements	Table 2 Item 3 Table 2 Item 10	Ri ΔC/C	(5) -	- Table 4	
			Insulation Resistance Voltage Proof	Table 3 Item 3 After 24 hrs recovery Table 2 Item 2	Ri VP	Table 3 90% U _R	-	
			Insulation Resistance Capacitance Change	Table 2 Item 3 Table 2 Item 10	Ri ΔC/C	(2) (5) -	- Table 4	
14	Corrosion	Para. 9.20	Final Measurements Visual Examination	No corrosion, damage or obliteration of marking	-	<u>.</u>	-	
15	Permanence of Marking	Para. 9.21	Final Measurements Visual Examination	No corrosion or obliteration of marking	-	-	-	
16	Damp Heat (Non-hermetically Sealed)	Para. 9.24	Not applicable.					

NOTES: See Page 17.



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APPENDIX 'A'

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AGREED DEVIATIONS FOR EUROFARAD (F)

ITEMS AFFECTED	DESCRIPTION OF DEVIATIONS
Paras. 4.2.2 and 4.2.3	(a) Para. 9.4.1.5, Voltage Drop: Voltage Drop may be performed as a d.c. Resistance measurement in accordance with MIL-STD-202, Method 303. In this case, the maximum value of d.c. Resistance (Rs) shall be as specified in Column 6 of Table 1(a).