

FINAL VERSION

VERSION FINALE

**Semiconductor devices –
Part 16-1: Microwave integrated circuits – Amplifiers**

**Dispositifs à semiconducteurs –
Partie 16-1: Circuits intégrés hyperfréquences – Amplificateurs**

CONTENTS

FOREWORD.....	7
1 Scope.....	9
2 Normative references	9
3 Terms and definitions	9
4 Essential ratings and characteristics.....	12
4.1 General.....	12
4.1.1 Circuit identification and types	12
4.2 Application related description.....	13
4.2.1 Conformance to system and/or interface information	13
4.2.2 Overall block diagram.....	13
4.2.3 Reference data.....	13
4.2.4 Electrical compatibility.....	13
4.2.5 Associated devices.....	13
4.3 Specification of the function	14
4.3.1 Detailed block diagram – Functional blocks	14
4.3.2 Identification and function of terminals.....	14
4.3.3 Functional description.....	15
4.3.4 Family-related characteristics	15
4.4 Limiting values (absolute maximum rating system)	15
4.4.1 Electrical limiting values	16
4.4.2 Temperatures	16
4.5 Operating conditions (within the specified operating temperature range)	16
4.5.1 Power supplies positive and/or negative values	17
4.5.2 Initialization sequences (where appropriate)	17
4.5.3 Input voltage(s) (where appropriate)	17
4.5.4 Output current(s) (where appropriate).....	17
4.5.5 Voltage and/or current at power terminal(s)	17
4.5.6 External elements (where appropriate)	17
4.5.7 Operating temperature range.....	17
4.6 Electrical characteristics	17
4.6.1 Static characteristics	17
4.6.2 Dynamic or a.c. characteristics	17
4.7 Mechanical and environmental ratings, characteristics and data.....	18
4.8 Additional information.....	19
4.8.1 Equivalent input and output circuit.....	19
4.8.2 Internal protection	19
4.8.3 Capacitors at terminals.....	19
4.8.4 Thermal resistance	19
4.8.5 Interconnections to other types of circuit	19
4.8.6 Effects of externally connected component(s).....	19
4.8.7 Recommendations for any associated device(s)	19
4.8.8 Handling precautions.....	19
4.8.9 Application data.....	19
4.8.10 Other application information.....	19
4.8.11 Date of issue of the data sheet	19
5 Measuring methods	19
5.1 General.....	19
5.1.1 Characteristic impedances.....	19
5.1.2 General precautions	19
5.1.3 Handling precautions.....	20
5.1.4 Types	20

5.2	Linear (power) gain (G_{lin})	20
5.2.1	Purpose	20
5.2.2	Circuit diagram	20
5.2.3	Principle of measurement	20
5.2.4	Circuit description and requirements	21
5.2.5	Precautions to be observed	21
5.2.6	Measurement procedure	21
5.2.7	Specified conditions	21
5.3	Linear (power) gain flatness (ΔG_{lin})	21
5.3.1	Purpose	21
5.3.2	Circuit diagram	21
5.3.3	Principle of measurement	21
5.3.4	Circuit description and requirements	22
5.3.5	Precautions to be observed	22
5.3.6	Measurement procedure	22
5.3.7	Specified conditions	22
5.4	Power gain (G_p)	22
5.4.1	Purpose	22
5.4.2	Circuit diagram	22
5.4.3	Principle of measurement	22
5.4.4	Circuit description and requirements	22
5.4.5	Precautions to be observed	22
5.4.6	Measurement procedure	23
5.4.7	Specified conditions	23
5.5	(Power) gain flatness (ΔG_p)	23
5.5.1	Purpose	23
5.5.2	Circuit diagram	23
5.5.3	Principle of measurement	23
5.5.4	Circuit description and requirements	23
5.5.5	Precautions to be observed	23
5.5.6	Measurement procedure	23
5.5.7	Specified conditions	24
5.6	(Maximum available) gain reduction (ΔG_{red})	24
5.6.1	Purpose	24
5.6.2	Circuit diagram	24
5.6.3	Principle of measurement	24
5.6.4	Circuit description and requirements	24
5.6.5	Precautions to be observed	24
5.6.6	Measurement procedure	24
5.6.7	Specified conditions	25
5.7	Limiting output power ($P_{O(ltg)}$) and limiting output power flatness ($\Delta P_{O(ltg)}$)	25
5.7.1	Purpose	25
5.7.2	Circuit diagram	25
5.7.3	Principle of measurement	25
5.7.4	Circuit description and requirements	25
5.7.5	Precautions to be observed	25
5.7.6	Measurement procedure	25
5.7.7	Specified conditions	25
5.8	Output power (P_O)	26
5.8.1	Purpose	26
5.8.2	Circuit diagram	26
5.8.3	Principle of measurement	26
5.8.4	Circuit description and requirements	26
5.8.5	Precautions to be observed	26
5.8.6	Measurement procedure	26

5.8.7	Specified conditions	26
5.9	Output power at 1 dB gain compression ($P_{O(1dB)}$)	26
5.9.1	Purpose.....	26
5.9.2	Circuit diagram	26
5.9.3	Principle of measurement	26
5.9.4	Circuit description and requirements.....	27
5.9.5	Precautions to be observed	27
5.9.6	Measurement procedure	27
5.9.7	Specified conditions	27
5.10	Noise figure (F)	27
5.10.1	Purpose.....	27
5.10.2	Circuit diagram	27
5.10.3	Principle of measurement	28
5.10.4	Circuit description and requirements.....	28
5.10.5	Precautions to be observed	28
5.10.6	Measurement procedure	28
5.10.7	Specified conditions	29
5.11	Intermodulation distortion (two-tone) (P_n/P_1).....	29
5.11.1	Purpose.....	29
5.11.2	Circuit diagram	29
5.11.3	Principle of measurement	30
5.11.4	Circuit description and requirements.....	30
5.11.5	Precautions to be observed	30
5.11.6	Measurement procedure	30
5.11.7	Specified conditions	31
5.12	Power at the intercept point (for intermodulation products) ($P_n(IP)$).....	31
5.12.1	Purpose.....	31
5.12.2	Circuit diagram	31
5.12.3	Principle of measurement	31
5.12.4	Circuit description and requirements.....	31
5.12.5	Precautions to be observed	31
5.12.6	Measurement procedure	31
5.12.7	Specified conditions	32
5.13	Magnitude of the input reflection coefficient (input return loss) ($ S_{11} $)	32
5.13.1	Purpose.....	32
5.13.2	Circuit diagram	32
5.13.3	Principle of measurement	32
5.13.4	Circuit description and requirements.....	32
5.13.5	Precautions to be observed	33
5.13.6	Measurement procedure	33
5.13.7	Specified conditions	33
5.14	Magnitude of the output reflection coefficient (output return loss) ($ S_{22} $)	33
5.14.1	Magnitude of the output reflection coefficient (output return loss) under small-signal operating condition.....	33
5.14.2	Magnitude of the output reflection coefficient (output return loss) under large-signal operating condition	34
5.15	Magnitude of the reverse transmission coefficient (isolation) ($ S_{12} $)	36
5.15.1	Purpose.....	36
5.15.2	Circuit diagram	37
5.15.3	Principle of measurement	37
5.15.4	Circuit description and requirements.....	37
5.15.5	Precautions to be observed	37
5.15.6	Measurement procedure	37
5.15.7	Specified conditions	38

5.16	Conversion coefficient of amplitude modulation to phase modulation ($\alpha_{(AM-PM)}$)	38
5.16.1	Purpose	38
5.16.2	Circuit diagram	38
5.16.3	Principle of measurement	38
5.16.4	Circuit description and requirements	39
5.16.5	Precautions to be observed	39
5.16.6	Measurement procedure	39
5.16.7	Specified conditions	39
5.17	Group delay time ($t_d(\text{grp})$)	39
5.17.1	Purpose	39
5.17.2	Circuit diagram	40
5.17.3	Principle of measurement	40
5.17.4	Circuit description and requirements	40
5.17.5	Precautions to be observed	40
5.17.6	Measurement procedure	40
5.17.7	Specified conditions	40
5.18	Power added efficiency (η_{add})	41
5.18.1	Purpose	41
5.18.2	Circuit diagram	41
5.18.3	Principle of measurement	41
5.18.4	Circuit description and requirements	42
5.18.5	Precautions to be observed	42
5.18.6	Measurement procedure	42
5.18.7	Specified conditions	42
5.19	n th order harmonic distortion ratio (P_{nth}/P_1)	42
5.19.1	Purpose	42
5.19.2	Circuit diagram	43
5.19.3	Principle of measurement	43
5.19.4	Circuit description and requirements	43
5.19.5	Precautions to be observed	43
5.19.6	Measurement procedure	43
5.19.7	Specified conditions	44
5.20	Output noise power (P_N)	44
5.20.1	Purpose	44
5.20.2	Circuit diagram	44
5.20.3	Principle of measurement	44
5.20.4	Circuit description and requirements	45
5.20.5	Precautions to be observed	45
5.20.6	Measurement procedure	45
5.20.7	Specified conditions	45
5.21	Spurious intensity under specified load VSWR (P_{sp}/P_0)	46
5.21.1	Purpose	46
5.21.2	Circuit diagram	46
5.21.3	Principle of measurement	46
5.21.4	Circuit description and requirements	46
5.21.5	Precautions to be observed	46
5.21.6	Measurement procedure	47
5.21.7	Specified conditions	47
5.22	Adjacent channel power ratio ($P_{\text{adj}}/P_0(\text{mod})$)	47
5.22.1	Purpose	47
5.22.2	Circuit diagram	48
5.22.3	Principle of measurement	48
5.22.4	Circuit description and requirement	49
5.22.5	Precautions to be observed	49

5.22.6 Measurement procedure 49

5.22.7 Specified conditions 49

6 Verifying methods 50

6.1 Load mismatch tolerance (Ψ_L) 50

6.1.1 Purpose 50

6.1.2 Verification of method 1 (spurious intensity) 50

6.1.3 Verification of method 2 (no discontinuity of the frequency response) 52

6.2 Source mismatch tolerance (Ψ_S) 53

6.2.1 Purpose 53

6.2.2 Verification of method 1 (spurious intensity) 53

6.2.3 Verifying method 2 (no discontinuity of the frequency response) 54

6.3 Load mismatch ruggedness (Ψ_R) 55

6.3.1 Purpose 55

6.3.2 Circuit diagram 56

6.3.3 Circuit description and requirements 56

6.3.4 Precautions to be observed 56

6.3.5 Test procedure 56

6.3.6 Specified conditions 57

Figure 1 – Circuit for the measurements of linear gain 20

Figure 2 – Basic circuit for the measurement of the noise figure 28

Figure 3 – Basic circuit for the measurements of two-tone intermodulation distortion 30

Figure 4 – Circuit for the measurements of magnitude of input/output reflection coefficient (input/output return loss) 32

Figure 5 – Circuit for the measurement of output reflection coefficient 35

Figure 6 – Circuit for the measurement of isolation 37

Figure 7 – Basic circuit for the measurement of α (AM-PM) 38

Figure 8 – Circuit for the measurement of the power added efficiency 41

Figure 9 – Circuit for the measurements of the n th order harmonic distortion ratio 43

Figure 10 – Circuit diagram for the measurement of the output noise power 44

Figure 11 – Circuit diagram for the measurement of the spurious intensity 46

Figure 12 – Circuit for the measurement of the adjacent channel power ratio 48

Figure 13 – Circuit for the verification of load mismatch tolerance in method 1 50

Figure 14 – Circuit for the verification of load mismatch tolerance in method 2 52

Figure 15 – Circuit for the verification of source mismatch tolerance in method 1 53

Figure 16 – Circuit for the verification of source mismatch tolerance in method 2 54

Figure 17 – Circuit for the verification of load mismatch ruggedness 56

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DEVICES –

Part 16-1: Microwave integrated circuits – Amplifiers

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This Consolidated version of IEC 60747-16-1 bears the edition number 1.2. It consists of the first edition (2001-11) [documents 47E/200/FDIS and 47E/204/RVD], its amendment 1 (2007-01) [documents 47E/305/FDIS and 47E/317/RVD] and its amendment 2 (2017-02) [documents 47E/500/CDV and 47E/518/RVC]. The technical content is identical to the base edition and its amendments.

This Final version does not show where the technical content is modified by amendments 1 and 2. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 60747-16-1 has been prepared by subcommittee 47E: Discrete semiconductor devices, of IEC technical committee 47: Semiconductor devices.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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SEMICONDUCTOR DEVICES –

Part 16-1: Microwave integrated circuits – Amplifiers

1 Scope

This part of IEC 60747 provides the terminology, the essential ratings and characteristics, as well as the measuring methods for integrated circuit microwave power amplifiers.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60747. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60747 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050-702, *International Electrotechnical Vocabulary – Chapter 702: Oscillations, signals and related devices* (available at: <http://www.electropedia.org>)

IEC 60617, *Graphical symbols for diagrams* (available at: <http://std.iec.ch/iec60617>)

IEC 60747-1:2006, *Semiconductor devices – Part 1: General*
IEC 60747-1:2006/AMD1:2010

IEC 60747-4:2007, *Semiconductor devices – Discrete devices – Part 4: Microwave diodes and transistors*
IEC 60747-4:2007/AMD1:2017

IEC 60748-2:1997, *Semiconductor devices – Integrated circuits – Part 2: Digital integrated circuits*

IEC 60748-3:1986, *Semiconductor devices – Integrated circuits – Part 3: Analogue integrated circuits*
IEC 60748-3:1986/AMD1:1991
IEC 60748-3:1986/AMD2:1994

IEC 60748-4:1997, *Semiconductor devices – Integrated circuits – Part 4: Interface integrated circuits*

IEC/TS 61340-5-1, *Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements*

IEC/TS 61340-5-2, *Electrostatics - Part 5-2: Protection of electronic devices from electrostatic phenomena - User guide*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.