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Semiconductor devices - Part 16-6: Microwave integrated circuits - Frequency multipliers

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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**EN IEC 60747-16-6**

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English Version

Semiconductor devices - Part 16-6: Microwave integrated  
circuits - Frequency multipliers  
(IEC 60747-16-6:2019)

Dispositifs à semiconducteurs - Partie 16-6: Circuits  
intégrés hyperfréquences - Multiplicateurs de fréquence  
(IEC 60747-16-6:2019)

Halbleiterbauelemente - Teil 16-6: Integrierte  
Mikrowellenschaltkreise - Frequenzvervielfachung  
(IEC 60747-16-6:2019)

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**EN IEC 60747-16-6:2019 (E)****European foreword**

The text of document 47E/602/CDV, future edition 1 of IEC 60747-16-6, prepared by SC 47E "Discrete semiconductor devices" of IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60747-16-6:2019.

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**Annex ZA**  
(normative)

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NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                                                                                                       | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| IEC 60617          | -           | Graphical symbols for diagrams                                                                                                     | -            | -           |
| IEC 60747-1        | 2006        | Semiconductor devices - Part 1: General                                                                                            | -            | -           |
| + A1               | 2010        |                                                                                                                                    | -            | -           |
| IEC 60747-4        | -           | Semiconductor devices - Discrete devices --<br>Part 4: Microwave diodes and transistors                                            | -            |             |
| IEC 60747-16-3     | 2002        | Semiconductor devices - Part 16-3: EN 60747-16-3<br>Microwave integrated circuits - Frequency<br>converters                        | 2002         |             |
| + A1               | 2009        |                                                                                                                                    | + A1         | 2009        |
| + A2               | 2017        |                                                                                                                                    | + A2         | 2017        |
| IEC 61340-5-1      | -           | Electrostatics - Part 5-1: Protection of EN 61340-5-1<br>electronic devices from electrostatic<br>phenomena - General requirements | -            |             |
| IEC/TR 61340-5-2   | -           | Electrostatics -- Part 5-2: Protection of CLC/TR 61340-5-2-<br>electronic devices from electrostatic<br>phenomena - User guide     |              |             |



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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Semiconductor devices –  
Part 16-6: Microwave integrated circuits – Frequency multipliers**

**Dispositifs à semiconducteurs –  
Partie 16-6: Circuits intégrés hyperfréquences – Multiplicateurs de fréquence**





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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Semiconductor devices –  
Part 16-6: Microwave integrated circuits – Frequency multipliers**

**Dispositifs à semiconducteurs –  
Partie 16-6: Circuits intégrés hyperfréquences – Multiplicateurs de fréquence**

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Frequency multipliers****FOREWORD**

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The text of this International Standard is based on the following documents:

| CDV         | Report on voting |
|-------------|------------------|
| 47E/602/CDV | 47E/622A/RVC     |

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60747 series, published under the general title *Semiconductor devices*, can be found on the IEC website.

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- amended.

## SEMICONDUCTOR DEVICES –

### Part 16-6: Microwave integrated circuits – Frequency multipliers

#### 1 Scope

This part of IEC 60747 specifies the terminology, essential ratings and characteristics, and measuring methods of microwave integrated circuit frequency multipliers.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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/AMD 1:2010

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

IEC 60747-16-3:2002, *Semiconductor devices – Part 16-3: Microwave integrated circuits – Frequency converters*  
IEC 60747-16-3:2002/AMD 1:2009  
IEC 60747-16-3:2002/AMD 2:2017

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

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

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