

# INTERNATIONAL STANDARD



**Semiconductor devices –  
Part 16-5: Microwave integrated circuits – Oscillators**



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### SEMICONDUCTOR DEVICES –

#### Part 16-5: Microwave integrated circuits – Oscillators

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**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.**

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## SEMICONDUCTOR DEVICES –

### Part 16-5: Microwave integrated circuits – Oscillators

#### 1 Scope

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

This standard is applicable to the fixed and voltage-controlled semiconductor microwave oscillator devices, except the oscillator modules such as synthesizers which require external controllers.

NOTE This document is not applicable to the quartz crystal controlled oscillators. They are specified by IEC 60679-1.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 from <<http://std.iec.ch/iec60617>>)

IEC 60747-1:2006, *Semiconductor devices – Part 1: General* <sup>1)</sup>  
Amendment 1:2010

IEC 60747-4:2007, *Semiconductor devices – Discrete devices – Part 4: Microwave diodes and transistors*  
IEC 60747-4:2007/AMD 1:2017

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

<sup>1)</sup> A consolidated edition (2010) exists, including IEC 60747-1:2006 and its Amendment 1.

<sup>2)</sup> ~~A consolidated edition (2010) exists, including IEC 60747-16-3:2002 and its Amendment 1.~~