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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 20870.10-2023

Semiconductor devices - Part 16-10: Technology Approval Schedule for monolithic microwave integrated circuits

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1.Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is Part 10 of GB/T 20870 "Semiconductor Devices". GB/T 20870 has released the following parts.

---Part 16-1.Microwave integrated circuit amplifier;

---Part 16-2.Microwave integrated circuit prescaler;

---Part 16-5.Microwave integrated circuit oscillators;

---Part 16-10.Monolithic microwave integrated circuit technology receivable procedures.

This document is equivalent to IEC 60747-16-10.2004 "Semiconductor Devices Part 16-10 Monolithic Microwave Integrated Circuit Technology Acceptable

Collection Procedures".

This document adds two chapters. "Normative Reference Documents" and "Terms, Definitions and Abbreviations".

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

Introduction

Semiconductor devices are common basic products in the electronics industry chain and are the most basic units in electronic systems. GB/T 20870 "Semiconductors"

"Integrated Devices" is a microwave integrated circuit product standard. It is a basic and universal standard for the development, production and inspection of microwave integrated circuits.

Evaluating and assessing the quality and reliability of microwave integrated circuits plays an important role and is planned to consist of 10 parts.

---Part 16-1.Microwave integrated circuit amplifier. The purpose is to specify the terminology, basic ratings of microwave integrated circuit amplifiers

Values, properties, and test methods.

---Part 16-2.Microwave integrated circuit prescaler. The purpose is to specify the terms and letters of microwave integrated circuit prescalers.

Symbols, basic ratings, characteristics, and test methods.

---Part 16-3.Microwave integrated circuit frequency converter. The purpose is to specify the terminology and basic ratings of microwave integrated circuit inverters.

Values, properties, and test methods.

---Part 16-4.Microwave integrated circuit switches. The purpose is to specify the terminology, basic ratings, characteristics of microwave integrated circuit switches

properties and testing methods.

---Part 16-5.Microwave integrated circuit oscillators. The purpose is to specify the terminology, basic ratings of microwave integrated circuit oscillators

Values, properties, and test methods.

---Part 16-6.Microwave integrated circuit frequency multiplier. The purpose is to specify the terminology and basic ratings of microwave integrated circuit frequency multipliers.

Values, properties, and test methods.

---Part 16-7.Microwave integrated circuit attenuators. The purpose is to specify the terminology, basic ratings of microwave integrated circuit attenuators

Values, properties, and test methods.

---Part 16-8.Microwave integrated circuit limiter. The purpose is to specify the terminology, basic ratings of microwave integrated circuit limiters

Values, properties, and test methods.

---Part 16-9.Microwave integrated circuit phase shifters. The purpose is to specify the terminology, basic ratings of microwave integrated circuit phase shifters

Values, properties, and test methods.

---Part 16-10.Monolithic microwave integrated circuit technology receivable procedures. The purpose is to specify the design,

Terminology, definitions, symbols, quality systems, testing, evaluation, verification methods

and other requirements for manufacturing and delivery.

This series of standards is equivalent to the IEC 60747-16 series of standards, ensuring that microwave integrated circuit product standards are consistent with international standards, achieving

Microwave integrated circuit product standards are in line with international standards. Through the formulation of this series of standards, the terminology definitions and basic specifications of microwave integrated circuit products are unified.

The fixed values, characteristics and test methods are of great significance to the research, production, inspection and use of microwave integrated circuits, and at the same time complement and improve the semiconductor

The integrated circuit standard system plays a guiding role in the development of the microwave integrated circuit industry.

Semiconductor Devices Part 16-10.

Monolithic microwave integrated circuit technology receivable program

1 Scope

This document specifies the terminology, definitions, symbols, quality systems, testing, evaluation and design of monolithic microwave integrated circuits.

pricing, verification methods, and other requirements.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations

For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to

this document.

Note. GB/T 2423 (all parts) Environmental test [IEC 60068 (all parts)]

ductordevices-Part 2.Dimensions)

Note. GB/T 4728 (all parts) Graphical symbols for electrical diagrams [IEC 60617 (all parts)]

Note. GB/T 20870.1-2007 Semiconductor devices Part 16-1.Microwave integrated circuit amplifiers (IEC 60747-16-1.2001, IDT)

cuits-Part 1.General)

QC001002-3.2005 IEC Quality Assessment System (IEC Q) Procedure Rules for Electronic Components Part 3.Approval Procedure (IEC

Quality Assessment System for Electronic Component(IEC Q)-Rule of procedure-Part 3.

Approval procedure