

## Discrete Semiconductor Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

Market Report | 2023-10-15 | 143 pages | IMARC Group

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#### Report description:

Market Overview:

The global discrete semiconductor market size reached US\$ 27.3 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 37.9 Billion by 2028, exhibiting a growth rate (CAGR) of 5.2% during 2023-2028.

Discrete semiconductors are singular devices that are constructed to perform a function similar to that of two different devices in a specific configuration. Bipolar transistors, rectifiers, insulated-gate bipolar transistors (IGBTs), metal-oxide-semiconductor field-effect transistors (MOSFETs) and thyristors are some common product types. They are utilized to perform minor electronic functions, including power conversion and voltage regulation in computers, smartphones, hybrid cars, LED lighting, tablets and portable medical electronics. Discrete semiconductors are reliable, portable, and easily replaceable and offer increased operating speed and lower power consumption. As a result, they find extensive applications across the automotive, consumer electronics, and telecommunications industries.

#### Discrete Semiconductor Market Trends:

Significant growth in the automotive industry across the globe is creating a positive outlook for the market. Discrete semiconductors are widely used in vehicles enabled with mobile phone integration, independent directing guides, and heads-up displays. In line with this, the increasing adoption of electric vehicles (EVs), hybrid electric vehicles (HEV), autonomous car technology, and regenerative braking systems are favoring the market growth. Apart from this, various product innovations, such as the launch of silicon-carbide (SiC) MOSFETs that enhance power devices for EV powertrains and increase power density, energy efficiency, and reliability, are providing a thrust to the market growth. Additionally, the widespread product utilization to manufacture various consumer electronics, such as tablets, computers, ovens, refrigerators and portable electronics, is augmenting the market growth. Other factors, including the increasing demand for high-energy and power-efficient devices, extensive research and development (R&D) activities, growing requirement for high-energy and power-efficient devices, the

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launch of wireless and portable electronic products, and the rising need for green energy power generation, are anticipated to drive the market growth.

## Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global discrete semiconductor market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on type and end user.

Breakup by Type:

Diodes

General-Purpose Rectifiers

**High-Speed Rectifiers** 

**Switching Diodes** 

Zener Diodes

**ESD Protection Diodes** 

Variable-Capacitance Diodes

**Transistors** 

**MOSFET** 

**IGBT** 

**Bipolar Transistor** 

**Thyristor** 

Modules

Breakup by End User:

Automotive

**Consumer Electronics** 

Communication

Industrial

Others

Breakup by Region:

North America

**United States** 

Canada

Asia-Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

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France

**United Kingdom** 

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Diodes Incorporated, Fuji Electric Co. Ltd., Hitachi Ltd., Infineon Technologies AG, Littelfuse Inc., Microchip Technology Inc., Mitsubishi Electric Corporation, Nexperia (Wingtech Technology), NXP Semiconductors N.V., Onsemi, Qorvo, STMicroelectronics, Taiwan Semiconductor Manufacturing Company Limited and Toshiba Electronic Devices & Storage Corporation (Toshiba Corporation).

#### Key Questions Answered in This Report:

How has the global discrete semiconductor market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global discrete semiconductor market?

What are the key regional markets?

What is the breakup of the market based on the type?

What is the breakup of the market based on the end user?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global discrete semiconductor market and who are the key players?

What is the degree of competition in the industry?

#### **Table of Contents:**

- 1 Preface
- 2 Scope and Methodology
- 2.10bjectives of the Study
- 2.2Stakeholders
- 2.3Data Sources
- 2.3.1Primary Sources
- 2.3.2Secondary Sources
- 2.4Market Estimation
- 2.4.1Bottom-Up Approach
- 2.4.2Top-Down Approach
- 2.5Forecasting Methodology
- 3 Executive Summary
- 4 Introduction
- 4.10verview
- 4.2Key Industry Trends
- 5 Global Discrete Semiconductor Market
- 5.1Market Overview

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- 5.2Market Performance
- 5.3Impact of COVID-19
- 5.4Market Forecast
- 6 Market Breakup by Type
- 6.1Diodes
- 6.1.1 Market Trends
- 6.1.2 Key Segments
  - 6.1.2.1 General-Purpose Rectifiers
  - 6.1.2.2 High-Speed Rectifiers
  - 6.1.2.3 Switching Diodes
  - 6.1.2.4 Zener Diodes
  - 6.1.2.5 ESD Protection Diodes
  - 6.1.2.6 Variable-Capacitance Diodes
- 6.1.3 Market Forecast
- 6.2Transistors
- 6.2.1 Market Trends
- 6.2.2 Key Segments
  - 6.2.2.1 MOSFET
  - 6.2.2.2 IGBT
  - 6.2.2.3 Bipolar Transistor
- 6.2.3 Market Forecast
- 6.3Thyristor
- 6.3.1 Market Trends
- 6.3.2 Market Forecast
- 6.4Modules
- 6.4.1 Market Trends
- 6.4.2 Market Forecast
- 7 Market Breakup by End User
- 7.1Automotive
- 7.1.1 Market Trends
- 7.1.2 Market Forecast
- 7.2Consumer Electronics
- 7.2.1 Market Trends
- 7.2.2 Market Forecast
- 7.3Communication
- 7.3.1 Market Trends
- 7.3.2 Market Forecast
- 7.4Industrial
- 7.4.1 Market Trends
- 7.4.2 Market Forecast
- 7.50thers
- 7.5.1 Market Trends
- 7.5.2 Market Forecast
- 8 Market Breakup by Region
- 8.1North America
- 8.1.1 United States
  - 8.1.1.1 Market Trends

- 8.1.1.2 Market Forecast
- 8.1.2 Canada
  - 8.1.2.1 Market Trends
  - 8.1.2.2 Market Forecast
- 8.2Asia-Pacific
- 8.2.1 China
  - 8.2.1.1 Market Trends
  - 8.2.1.2 Market Forecast
- 8.2.2 Japan
  - 8.2.2.1 Market Trends
  - 8.2.2.2 Market Forecast
- 8.2.3 India
  - 8.2.3.1 Market Trends
  - 8.2.3.2 Market Forecast
- 8.2.4 South Korea
  - 8.2.4.1 Market Trends
  - 8.2.4.2 Market Forecast
- 8.2.5 Australia
  - 8.2.5.1 Market Trends
  - 8.2.5.2 Market Forecast
- 8.2.6 Indonesia
  - 8.2.6.1 Market Trends
  - 8.2.6.2 Market Forecast
- 8.2.7 Others
  - 8.2.7.1 Market Trends
- 8.2.7.2 Market Forecast
- 8.3Europe
- 8.3.1 Germany
  - 8.3.1.1 Market Trends
- 8.3.1.2 Market Forecast
- 8.3.2 France
  - 8.3.2.1 Market Trends
  - 8.3.2.2 Market Forecast
- 8.3.3 United Kingdom
  - 8.3.3.1 Market Trends
  - 8.3.3.2 Market Forecast
- 8.3.4 Italy
  - 8.3.4.1 Market Trends
- 8.3.4.2 Market Forecast
- 8.3.5 Spain
  - 8.3.5.1 Market Trends
  - 8.3.5.2 Market Forecast
- 8.3.6 Russia
  - 8.3.6.1 Market Trends
  - 8.3.6.2 Market Forecast
- 8.3.7 Others
  - 8.3.7.1 Market Trends

- 8.3.7.2 Market Forecast
- 8.4Latin America
- 8.4.1 Brazil
  - 8.4.1.1 Market Trends
  - 8.4.1.2 Market Forecast
- 8.4.2 Mexico
  - 8.4.2.1 Market Trends
  - 8.4.2.2 Market Forecast
- 8.4.3 Others
  - 8.4.3.1 Market Trends
  - 8.4.3.2 Market Forecast
- 8.5Middle East and Africa
- 8.5.1 Market Trends
- 8.5.2 Market Breakup by Country
- 8.5.3 Market Forecast
- 9 SWOT Analysis
- 9.10verview
- 9.2Strengths
- 9.3Weaknesses
- 9.40pportunities
- 9.5Threats
- 10 Value Chain Analysis
- 11 Porters Five Forces Analysis
- 11.10verview
- 11.2Bargaining Power of Buyers
- 11.3Bargaining Power of Suppliers
- 11.4Degree of Competition
- 11.5Threat of New Entrants
- 11.6Threat of Substitutes
- 12 Price Analysis
- 13 Competitive Landscape
- 13.1Market Structure
- 13.2Key Players
- 13.3Profiles of Key Players
- 13.3.1Diodes Incorporated
- 13.3.1.1 Company Overview
- 13.3.1.2 Product Portfolio
- 13.3.1.3 Financials
- 13.3.2Fuji Electric Co. Ltd.
  - 13.3.2.1 Company Overview
  - 13.3.2.2 Product Portfolio
  - 13.3.2.3 Financials
  - 13.3.2.4 SWOT Analysis
- 13.3.3Hitachi Ltd.
  - 13.3.3.1 Company Overview
  - 13.3.3.2 Product Portfolio
  - 13.3.3.3 Financials

- 13.3.3.4 SWOT Analysis
- 13.3.4Infineon Technologies AG
  - 13.3.4.1 Company Overview
  - 13.3.4.2 Product Portfolio
  - 13.3.4.3 Financials
  - 13.3.4.4 SWOT Analysis
- 13.3.5Littelfuse Inc.
  - 13.3.5.1 Company Overview
  - 13.3.5.2 Product Portfolio
  - 13.3.5.3 Financials
- 13.3.6 Microchip Technology Inc.
  - 13.3.6.1 Company Overview
  - 13.3.6.2 Product Portfolio
  - 13.3.6.3 Financials
  - 13.3.6.4 SWOT Analysis
- 13.3.7Mitsubishi Electric Corporation
  - 13.3.7.1 Company Overview
  - 13.3.7.2 Product Portfolio
  - 13.3.7.3 Financials
  - 13.3.7.4 SWOT Analysis
- 13.3.8Nexperia (Wingtech Technology)
  - 13.3.8.1 Company Overview
  - 13.3.8.2 Product Portfolio
- 13.3.9NXP Semiconductors N.V.
  - 13.3.9.1 Company Overview
  - 13.3.9.2 Product Portfolio
  - 13.3.9.3 Financials
- 13.3.10Onsemi
  - 13.3.10.1 Company Overview
  - 13.3.10.2 Product Portfolio
  - 13.3.10.3 SWOT Analysis
- 13.3.11Qorvo
  - 13.3.11.1 Company Overview
  - 13.3.11.2 Product Portfolio
  - 13.3.11.3 Financials
- 13.3.11.4 SWOT Analysis
- 13.3.12STMicroelectronics
  - 13.3.12.1 Company Overview
  - 13.3.12.2 Product Portfolio
- 13.3.13Taiwan Semiconductor Manufacturing Company Limited
  - 13.3.13.1 Company Overview
  - 13.3.13.2 Product Portfolio
  - 13.3.13.3 Financials
- 13.3.14Toshiba Electronic Devices & Storage Corporation (Toshiba Corporation)
  - 13.3.14.1 Company Overview
  - 13.3.14.2 Product Portfolio



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