

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

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## Abstracts

### 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 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

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?

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