

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

https://marketpublishers.com/r/S480E8136940EN.html

Date: January 2023

Pages: 143

Price: US\$ 2,499.00 (Single User License)

ID: S480E8136940EN

# **Abstracts**

The global semiconductor rectifier market size reached US\$ 4.4 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 6.7 Billion by 2028, exhibiting a growth rate (CAGR) of 6.73% during 2023-2028.

A semiconductor rectifier is a two-lead device that converts alternating current (AC) to direct current (DC) and enables the current to pass in one direction. It consists of a transformer, cabinet and stack and is commonly available in single-phase and three-phase variants. It is widely used in the power supply systems of electronic equipment for isolating signals from the source, rectifying the voltage, controlling the signal size and voltage reference. In comparison to the traditionally used vacuum tubes, semiconductor rectifiers do not require warm-up time for operation, are cost-effective, highly sensitive to radiation and consume lesser power. As a result, they find extensive application across various industries, such as automotive, consumer electronics, power, information technology (IT) and telecommunications.

#### Semiconductor Rectifier Market Trends:

The rising deployment of smart grids across the globe is one of the key factors driving the growth of the market. Semiconductor rectifiers are widely used as guards in the circuits to avoid accidental reversal of supply voltage in electronic components. Additionally, the widespread product utilization in consumer electronics, such as laptops, smartphones, computers, for high-frequency rectification and enhanced energy efficiency is favoring the market growth. Moreover, various product innovations, such as the development of environmentally friendly semiconductor rectifiers that are manufactured using biocompatible and biodegradable materials, are providing a thrust to the market growth. In line with this, the increasing product utilization in automotive



electronics, such as central body control, modern electric power steering, braking system and seat control, is positively impacting the market growth. Other factors, including the increasing miniaturization of electronic components, along with the implementation of various government initiatives on modern power distribution and generation infrastructure, are anticipated to drive the market toward growth.

# Key Market Segmentation:

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

Breakup by Product:

Single Phase Three Phase

Breakup by Type:

Low Current Rectifier Medium Current Rectifier High Current Rectifier

Breakup by End Use Industry:

Automotive
Consumer Electronics
Power and Utility
IT and Telecom
Others

Breakup by Region:

North America
United States
Canada
Asia-Pacific
China
Japan



	$\sim$	
	11	~

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 ABB Ltd., ASI Semiconductor Inc., Infineon Technologies AG, Microchip Technology Inc., Mitsubishi Electric Corporation, NXP Semiconductors N.V., Renesas Electronics Corporation, STMicroelectronics, Texas Instruments Incorporated and Toshiba Corporation.

#### Key Questions Answered in This Report

- 1. What was the size of the global semiconductor rectifier market in 2022?
- 2. What is the expected growth rate of the global semiconductor rectifier market during 2023-2028?
- 3. What are the key factors driving the global semiconductor rectifier market?
- 4. What has been the impact of COVID-19 on the global semiconductor rectifier market?
- 5. What is the breakup of the global semiconductor rectifier market based on the product?
- 6. What is the breakup of the global semiconductor rectifier market based on the end use industry?
- 7. What are the key regions in the global semiconductor rectifier market?
- 8. Who are the key players/companies in the global semiconductor rectifier market?



# **Contents**

#### 1 PREFACE

#### 2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
  - 2.3.1 Primary Sources
  - 2.3.2 Secondary Sources
- 2.4 Market Estimation
  - 2.4.1 Bottom-Up Approach
  - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

#### **3 EXECUTIVE SUMMARY**

#### **4 INTRODUCTION**

- 4.1 Overview
- 4.2 Key Industry Trends

#### **5 GLOBAL SEMICONDUCTOR RECTIFIER MARKET**

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

#### **6 MARKET BREAKUP BY PRODUCT**

- 6.1 Single Phase
  - 6.1.1 Market Trends
  - 6.1.2 Market Forecast
- 6.2 Three Phase
  - 6.2.1 Market Trends
  - 6.2.2 Market Forecast



#### 7 MARKET BREAKUP BY TYPE

- 7.1 Low Current Rectifier
  - 7.1.1 Market Trends
  - 7.1.2 Market Forecast
- 7.2 Medium Current Rectifier
  - 7.2.1 Market Trends
  - 7.2.2 Market Forecast
- 7.3 High Current Rectifier
  - 7.3.1 Market Trends
  - 7.3.2 Market Forecast

#### **8 MARKET BREAKUP BY END USE INDUSTRY**

- 8.1 Automotive
  - 8.1.1 Market Trends
  - 8.1.2 Market Forecast
- 8.2 Consumer Electronics
  - 8.2.1 Market Trends
  - 8.2.2 Market Forecast
- 8.3 Power and Utility
  - 8.3.1 Market Trends
  - 8.3.2 Market Forecast
- 8.4 IT and Telecom
  - 8.4.1 Market Trends
  - 8.4.2 Market Forecast
- 8.5 Others
  - 8.5.1 Market Trends
  - 8.5.2 Market Forecast

# 9 MARKET BREAKUP BY REGION

- 9.1 North America
  - 9.1.1 United States
    - 9.1.1.1 Market Trends
    - 9.1.1.2 Market Forecast
  - 9.1.2 Canada
    - 9.1.2.1 Market Trends
    - 9.1.2.2 Market Forecast



- 9.2 Asia-Pacific
  - 9.2.1 China
    - 9.2.1.1 Market Trends
    - 9.2.1.2 Market Forecast
  - 9.2.2 Japan
    - 9.2.2.1 Market Trends
    - 9.2.2.2 Market Forecast
  - 9.2.3 India
    - 9.2.3.1 Market Trends
    - 9.2.3.2 Market Forecast
  - 9.2.4 South Korea
    - 9.2.4.1 Market Trends
    - 9.2.4.2 Market Forecast
  - 9.2.5 Australia
    - 9.2.5.1 Market Trends
    - 9.2.5.2 Market Forecast
  - 9.2.6 Indonesia
    - 9.2.6.1 Market Trends
    - 9.2.6.2 Market Forecast
  - 9.2.7 Others
    - 9.2.7.1 Market Trends
    - 9.2.7.2 Market Forecast
- 9.3 Europe
  - 9.3.1 Germany
    - 9.3.1.1 Market Trends
    - 9.3.1.2 Market Forecast
  - 9.3.2 France
    - 9.3.2.1 Market Trends
    - 9.3.2.2 Market Forecast
  - 9.3.3 United Kingdom
    - 9.3.3.1 Market Trends
    - 9.3.3.2 Market Forecast
  - 9.3.4 Italy
    - 9.3.4.1 Market Trends
    - 9.3.4.2 Market Forecast
  - 9.3.5 Spain
    - 9.3.5.1 Market Trends
    - 9.3.5.2 Market Forecast
  - 9.3.6 Russia



- 9.3.6.1 Market Trends
- 9.3.6.2 Market Forecast
- 9.3.7 Others
  - 9.3.7.1 Market Trends
  - 9.3.7.2 Market Forecast
- 9.4 Latin America
  - 9.4.1 Brazil
    - 9.4.1.1 Market Trends
    - 9.4.1.2 Market Forecast
  - 9.4.2 Mexico
    - 9.4.2.1 Market Trends
    - 9.4.2.2 Market Forecast
  - 9.4.3 Others
    - 9.4.3.1 Market Trends
    - 9.4.3.2 Market Forecast
- 9.5 Middle East and Africa
  - 9.5.1 Market Trends
  - 9.5.2 Market Breakup by Country
  - 9.5.3 Market Forecast

#### **10 SWOT ANALYSIS**

- 10.1 Overview
- 10.2 Strengths
- 10.3 Weaknesses
- 10.4 Opportunities
- 10.5 Threats

#### 11 VALUE CHAIN ANALYSIS

#### 12 PORTERS FIVE FORCES ANALYSIS

- 12.1 Overview
- 12.2 Bargaining Power of Buyers
- 12.3 Bargaining Power of Suppliers
- 12.4 Degree of Competition
- 12.5 Threat of New Entrants
- 12.6 Threat of Substitutes



#### 13 PRICE ANALYSIS

#### 14 COMPETITIVE LANDSCAPE

- 14.1 Market Structure
- 14.2 Key Players
- 14.3 Profiles of Key Players
  - 14.3.1 ABB Ltd.
    - 14.3.1.1 Company Overview
    - 14.3.1.2 Product Portfolio
    - 14.3.1.3 Financials
    - 14.3.1.4 SWOT Analysis
  - 14.3.2 ASI Semiconductor Inc.
    - 14.3.2.1 Company Overview
    - 14.3.2.2 Product Portfolio
  - 14.3.3 Infineon Technologies AG
    - 14.3.3.1 Company Overview
    - 14.3.3.2 Product Portfolio
    - 14.3.3.3 Financials
  - 14.3.3.4 SWOT Analysis
  - 14.3.4 Microchip Technology Inc.
    - 14.3.4.1 Company Overview
    - 14.3.4.2 Product Portfolio
    - 14.3.4.3 Financials
    - 14.3.4.4 SWOT Analysis
  - 14.3.5 Mitsubishi Electric Corporation
    - 14.3.5.1 Company Overview
    - 14.3.5.2 Product Portfolio
    - 14.3.5.3 Financials
    - 14.3.5.4 SWOT Analysis
  - 14.3.6 NXP Semiconductors N.V.
    - 14.3.6.1 Company Overview
    - 14.3.6.2 Product Portfolio
    - 14.3.6.3 Financials
    - 14.3.6.4 SWOT Analysis
  - 14.3.7 Renesas Electronics Corporation
    - 14.3.7.1 Company Overview
    - 14.3.7.2 Product Portfolio
    - 14.3.7.3 Financials



- 14.3.7.4 SWOT Analysis
- 14.3.8 STMicroelectronics
  - 14.3.8.1 Company Overview
  - 14.3.8.2 Product Portfolio
  - 14.3.8.3 Financials
- 14.3.8.4 SWOT Analysis
- 14.3.9 Texas Instruments Incorporated
  - 14.3.9.1 Company Overview
  - 14.3.9.2 Product Portfolio
  - 14.3.9.3 Financials
- 14.3.9.4 SWOT Analysis
- 14.3.10 Toshiba Corporation
  - 14.3.10.1 Company Overview
  - 14.3.10.2 Product Portfolio
  - 14.3.10.3 Financials
  - 14.3.10.4 SWOT Analysis



# **List Of Tables**

#### LIST OF TABLES

Table 1: Global: Semiconductor Rectifier Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Semiconductor Rectifier Market Forecast: Breakup by Product (in Million US\$), 2023-2028

Table 3: Global: Semiconductor Rectifier Market Forecast: Breakup by Type (in Million US\$), 2023-2028

Table 4: Global: Semiconductor Rectifier Market Forecast: Breakup by End Use Industry (in Million US\$), 2023-2028

Table 5: Global: Semiconductor Rectifier Market Forecast: Breakup by Region (in Million US\$), 2023-2028

Table 6: Global: Semiconductor Rectifier Market: Competitive Structure

Table 7: Global: Semiconductor Rectifier Market: Key Players



# **List Of Figures**

#### LIST OF FIGURES

Figure 1: Global: Semiconductor Rectifier Market: Major Drivers and Challenges Figure 2: Global: Semiconductor Rectifier Market: Sales Value (in Billion US\$),

2017-2022

Figure 3: Global: Semiconductor Rectifier Market Forecast: Sales Value (in Billion US\$), 2023-2028

Figure 4: Global: Semiconductor Rectifier Market: Breakup by Product (in %), 2022

Figure 5: Global: Semiconductor Rectifier Market: Breakup by Type (in %), 2022

Figure 6: Global: Semiconductor Rectifier Market: Breakup by End Use Industry (in %), 2022

Figure 7: Global: Semiconductor Rectifier Market: Breakup by Region (in %), 2022

Figure 8: Global: Semiconductor Rectifier (Single Phase) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 9: Global: Semiconductor Rectifier (Single Phase) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 10: Global: Semiconductor Rectifier (Three Phase) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 11: Global: Semiconductor Rectifier (Three Phase) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 12: Global: Semiconductor Rectifier (Low Current Rectifier) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 13: Global: Semiconductor Rectifier (Low Current Rectifier) Market Forecast:

Sales Value (in Million US\$), 2023-2028

Figure 14: Global: Semiconductor Rectifier (Medium Current Rectifier) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 15: Global: Semiconductor Rectifier (Medium Current Rectifier) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 16: Global: Semiconductor Rectifier (High Current Rectifier) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 17: Global: Semiconductor Rectifier (High Current Rectifier) Market Forecast:

Sales Value (in Million US\$), 2023-2028

Figure 18: Global: Semiconductor Rectifier (Automotive) Market: Sales Value (in Million US\$), 2017 & 2022

Figure 19: Global: Semiconductor Rectifier (Automotive) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 20: Global: Semiconductor Rectifier (Consumer Electronics) Market: Sales Value



(in Million US\$), 2017 & 2022

Figure 21: Global: Semiconductor Rectifier (Consumer Electronics) Market Forecast:

Sales Value (in Million US\$), 2023-2028

Figure 22: Global: Semiconductor Rectifier (Power and Utility) Market: Sales Value (in

Million US\$), 2017 & 2022

Figure 23: Global: Semiconductor Rectifier (Power and Utility) Market Forecast: Sales

Value (in Million US\$), 2023-2028

Figure 24: Global: Semiconductor Rectifier (IT and Telecom) Market: Sales Value (in

Million US\$), 2017 & 2022

Figure 25: Global: Semiconductor Rectifier (IT and Telecom) Market Forecast: Sales

Value (in Million US\$), 2023-2028

Figure 26: Global: Semiconductor Rectifier (Other End Use Industries) Market: Sales

Value (in Million US\$), 2017 & 2022

Figure 27: Global: Semiconductor Rectifier (Other End Use Industries) Market Forecast:

Sales Value (in Million US\$), 2023-2028

Figure 28: North America: Semiconductor Rectifier Market: Sales Value (in Million US\$),

2017 & 2022

Figure 29: North America: Semiconductor Rectifier Market Forecast: Sales Value (in

Million US\$), 2023-2028

Figure 30: United States: Semiconductor Rectifier Market: Sales Value (in Million US\$),

2017 & 2022

Figure 31: United States: Semiconductor Rectifier Market Forecast: Sales Value (in

Million US\$), 2023-2028

Figure 32: Canada: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017

& 2022

Figure 33: Canada: Semiconductor Rectifier Market Forecast: Sales Value (in Million

US\$), 2023-2028

Figure 34: Asia-Pacific: Semiconductor Rectifier Market: Sales Value (in Million US\$),

2017 & 2022

Figure 35: Asia-Pacific: Semiconductor Rectifier Market Forecast: Sales Value (in

Million US\$), 2023-2028

Figure 36: China: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 &

2022

Figure 37: China: Semiconductor Rectifier Market Forecast: Sales Value (in Million

US\$), 2023-2028

Figure 38: Japan: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 &

2022

Figure 39: Japan: Semiconductor Rectifier Market Forecast: Sales Value (in Million

US\$), 2023-2028



Figure 40: India: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 41: India: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 42: South Korea: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 43: South Korea: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 44: Australia: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 45: Australia: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 46: Indonesia: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 47: Indonesia: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 48: Others: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 49: Others: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 50: Europe: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 51: Europe: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 52: Germany: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 53: Germany: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 54: France: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 55: France: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 56: United Kingdom: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 57: United Kingdom: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 58: Italy: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 59: Italy: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$),



2023-2028

Figure 60: Spain: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 61: Spain: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 62: Russia: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 63: Russia: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 64: Others: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 65: Others: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 66: Latin America: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 67: Latin America: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 68: Brazil: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 69: Brazil: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 70: Mexico: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 71: Mexico: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 72: Others: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 73: Others: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 74: Middle East and Africa: Semiconductor Rectifier Market: Sales Value (in Million US\$), 2017 & 2022

Figure 75: Middle East and Africa: Semiconductor Rectifier Market: Breakup by Country (in %), 2022

Figure 76: Middle East and Africa: Semiconductor Rectifier Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 77: Global: Semiconductor Rectifier Industry: SWOT Analysis

Figure 78: Global: Semiconductor Rectifier Industry: Value Chain Analysis

Figure 79: Global: Semiconductor Rectifier Industry: Porter's Five Forces Analysis



#### I would like to order

Product name: Semiconductor Rectifier Market: Global Industry Trends, Share, Size, Growth,

Opportunity and Forecast 2023-2028

Product link: <a href="https://marketpublishers.com/r/S480E8136940EN.html">https://marketpublishers.com/r/S480E8136940EN.html</a>

Price: US\$ 2,499.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

# **Payment**

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/S480E8136940EN.html">https://marketpublishers.com/r/S480E8136940EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970



