

Passive Electronic Components Market Forecasts to 2034 – Global Analysis By Component Type (Capacitors, Resistors, Inductors, Transformers, Ferrite Beads, EMI/RFI Filters, Crystal Resonators, Oscillators, and Other Passive Components), Material, Mounting Technology, Application, End-Use Industry, and By Geography

<https://marketpublishers.com/r/P85504806265EN.html>

Date: August 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: P85504806265EN

Abstracts

According to Statistics MRC, the Global Passive Electronic Components Market is accounted for \$34.1 billion in 2026 and is expected to reach \$47.0 billion by 2034 growing at a CAGR of 4.1% during the forecast period. Passive electronic components are fundamental circuit elements that do not require an external power source to operate and cannot amplify electrical signals, including resistors, capacitors, inductors, transformers, and other components essential for power management, signal filtering, signal conditioning, timing and frequency control, energy storage, electromagnetic interference suppression, and circuit protection. These components are available in surface mount technology and through-hole technology mounting configurations. The market serves diverse applications across consumer electronics, automotive, telecommunications, industrial, aerospace and defense, healthcare, and other sectors.

Market Dynamics:

Driver:

Growing electronics production and demand for miniaturized components

The rapid expansion of global electronics production and increasing demand for

miniaturized, high-performance components are primary drivers for the passive electronic components market. Consumer electronics including smartphones, wearables, and smart home devices require increasingly compact passive components with enhanced performance. The automotive industry's transition toward electric and autonomous vehicles is increasing electronic content, creating demand for passive components. Telecommunications infrastructure including 5G networks requires sophisticated passive components for signal conditioning and filtering. Industrial automation and IoT deployments are expanding component demand. As electronics content grows across all sectors, passive component demand continues increasing, supporting sustained market expansion.

Restraint:

Supply chain disruptions and raw material availability

Significant supply chain challenges and raw material availability constraints represent a major restraint for the passive electronic components market. Electronic component manufacturing requires specialized materials including ceramics, tantalum, aluminum, and other raw materials with concentrated supply sources. Supply chain disruptions including geopolitical tensions, logistics bottlenecks, and production capacity limitations affect component availability. Manufacturers may face extended lead times and allocation challenges. Raw material price volatility affects production costs. These supply chain uncertainties may affect production planning and market growth, particularly for manufacturers with limited supply chain resilience.

Opportunity:

Growing adoption of advanced packaging and high-frequency applications

The increasing adoption of advanced packaging technologies and expanding high-frequency applications presents significant opportunities for the passive electronic components market. Advanced packaging including system-in-package and module integration requires embedded passive components enabling higher integration density. 5G and millimeter-wave applications require specialized passive components for high-frequency performance. Automotive radar and sensor applications create demand for high-performance components. As electronics become more sophisticated and frequencies increase, advanced passive components capture growing market share, enabling new applications and device capabilities.

Threat:

Competition from integrated active solutions

Competition from integrated active solutions and system-on-chip approaches poses significant threats to traditional passive component market growth. Integration of passive functions into active devices or modules may reduce discrete component demand. System-on-chip designs incorporate some passive functions, reducing external component requirements. Active devices with integrated filtering and conditioning capabilities may displace discrete components. Technology trends toward higher integration may affect component demand patterns. This integration trend may limit growth in certain passive component categories, particularly in high-volume consumer applications where integration reduces component counts.

Covid-19 Impact:

The COVID-19 pandemic had a significant impact on the passive electronic components market. Initial disruptions included supply chain interruptions, factory shutdowns, and reduced electronics production. Component shortages affected electronics manufacturing across sectors. However, the pandemic accelerated digital transformation and electronics demand across consumer, computing, and telecommunications. Semiconductor shortages prompted increased demand for related passive components. Post-pandemic, electronics production recovery and continued digitalization have supported component demand, with manufacturers addressing supply chain resilience through strategic inventory and supplier diversification.

The Surface Mount Technology (SMT) segment is expected to be the largest during the forecast period

The Surface Mount Technology (SMT) segment is expected to account for the largest market share during the forecast period, driven by its advantages in miniaturization, higher component density, and compatibility with automated assembly processes for high-volume electronics production. SMT components are mounted directly onto printed circuit board surfaces, enabling smaller board sizes, reduced weight, and improved electrical performance. The segment benefits from widespread adoption across consumer electronics, automotive, telecommunications, and industrial applications. Established manufacturing infrastructure and continuous innovation support segment dominance. As electronics continue miniaturizing and production volumes increase, SMT maintains the largest mounting technology segment share throughout the forecast

period.

The Circuit Protection segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the Circuit Protection segment is predicted to witness the highest growth rate, fueled by increasing electronic content in vehicles, growing demand for reliable power protection in consumer electronics, and expanding applications in renewable energy and industrial systems. Circuit protection components including fuses, transient voltage suppressors, and surge protectors protect sensitive electronics from voltage spikes and overcurrent events. The segment benefits from rising automation and electrification trends requiring robust circuit protection. Growing EV adoption and charging infrastructure create new protection requirements. As electronic systems become more sophisticated and vulnerable, circuit protection application expands, delivering the fastest segment growth.

Region with largest share:

During the forecast period, the Asia-Pacific region is expected to hold the largest market share, supported by concentrated electronics manufacturing, extensive component production facilities, and the presence of major electronics manufacturers. China, Taiwan, South Korea, and Japan host the world's largest electronics production and component manufacturing operations. The region accounts for a substantial share of global electronics output and passive component consumption. Government support for electronics manufacturing and technology development is expanding. With concentrated manufacturing and continuous production expansion, Asia Pacific maintains its dominant market position.

Region with highest CAGR:

Over the forecast period, the Asia-Pacific region is anticipated to exhibit the highest CAGR, driven by continued electronics production growth, rising domestic consumption, and expanding electronics manufacturing across India and Southeast Asian countries. The region's electronics industry continues expanding with new manufacturing facilities and production capacity additions. Government programs promoting electronics manufacturing and technology development are accelerating component demand. Growing consumer electronics markets and industrial automation create sustained demand. As electronics production expands across the region, Asia Pacific delivers the fastest passive electronic components market growth globally.

Key players in the market

Some of the key players in Passive Electronic Components Market include Murata Manufacturing Co., Ltd., TDK Corporation, KYOCERA AVX Components Corporation, Yageo Corporation, Vishay Intertechnology, Inc., KEMET Corporation (YAGEO Group), Taiyo Yuden Co., Ltd., Samsung Electro-Mechanics Co., Ltd., Walsin Technology Corporation, Nichicon Corporation, Rubycon Corporation, Panasonic Industry Co., Ltd., Bourns, Inc., Coilcraft, Inc., Würth Elektronik GmbH & Co. KG, and ROHM Co., Ltd.

Key Developments:

In July 2026, Murata commercialized its 1210-inch size Metal Terminal Type Common Mode Choke Coils engineered specifically for the 10Base-T1S in-vehicle Ethernet standard.

In July 2026, TDK expanded its automotive passive portfolio by launching the B43693/B43793 series of 125 V-rated axial and soldering-star aluminum electrolytic capacitors optimized for extreme vibration environments.

In April 2026, TDK introduced ultra-compact common-mode chokes measuring 0.6 mm x 0.3 mm x 0.3 mm for high-density EMI suppression in smartphones, wearables, and miniaturized consumer electronics.

Component Types Covered:

Capacitors

Resistors

Inductors

Transformers

Ferrite Beads

EMI/RFI Filters

Crystal Resonators

Oscillators

Other Passive Components

Materials Covered:

Ceramic

Aluminum

Tantalum

Film

Ferrite

Carbon

Metal Alloy

Silicon-Based Dielectric Materials

Other Materials

Mounting Technologies Covered:

Surface Mount Technology (SMT)

Through-Hole Technology (THT)

Applications Covered:

Power Management

Signal Filtering

Signal Conditioning

Timing and Frequency Control

Energy Storage

Electromagnetic Interference (EMI) Suppression

Circuit Protection

End-Use Industries Covered:

Consumer Electronics

Automotive

Industrial Electronics

Telecommunications

Aerospace & Defense

Healthcare

Energy & Power

IT & Data Centers

Railways

Marine

Other End-Use Industries

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL PASSIVE ELECTRONIC COMPONENTS MARKET, BY COMPONENT TYPE

- 5.1 Capacitors
 - 5.1.1 Ceramic Capacitors
 - 5.1.2 Aluminum Electrolytic Capacitors
 - 5.1.3 Tantalum Capacitors
 - 5.1.4 Film Capacitors
 - 5.1.5 Supercapacitors
 - 5.1.6 Mica & Paper Capacitors
- 5.2 Resistors
 - 5.2.1 Fixed Resistors
 - 5.2.2 Variable Resistors
 - 5.2.3 Thermistors
 - 5.2.4 Varistors
- 5.3 Inductors
 - 5.3.1 Power Inductors
 - 5.3.2 RF Inductors
 - 5.3.3 Multilayer Inductors
 - 5.3.4 Chokes
- 5.4 Transformers
- 5.5 Ferrite Beads
- 5.6 EMI/RFI Filters
- 5.7 Crystal Resonators
- 5.8 Oscillators
- 5.9 Other Passive Components

6 GLOBAL PASSIVE ELECTRONIC COMPONENTS MARKET, BY MATERIAL

- 6.1 Ceramic
- 6.2 Aluminum
- 6.3 Tantalum
- 6.4 Film
- 6.5 Ferrite
- 6.6 Carbon

- 6.7 Metal Alloy
- 6.8 Silicon-Based Dielectric Materials
- 6.9 Other Materials

7 GLOBAL PASSIVE ELECTRONIC COMPONENTS MARKET, BY MOUNTING TECHNOLOGY

- 7.1 Surface Mount Technology (SMT)
- 7.2 Through-Hole Technology (THT)

8 GLOBAL PASSIVE ELECTRONIC COMPONENTS MARKET, BY APPLICATION

- 8.1 Power Management
- 8.2 Signal Filtering
- 8.3 Signal Conditioning
- 8.4 Timing and Frequency Control
- 8.5 Energy Storage
- 8.6 Electromagnetic Interference (EMI) Suppression
- 8.7 Circuit Protection

9 GLOBAL PASSIVE ELECTRONIC COMPONENTS MARKET, BY END-USE INDUSTRY

- 9.1 Consumer Electronics
- 9.2 Automotive
- 9.3 Industrial Electronics
- 9.4 Telecommunications
- 9.5 Aerospace & Defense
- 9.6 Healthcare
- 9.7 Energy & Power
- 9.8 IT & Data Centers
- 9.9 Railways
- 9.10 Marine
- 9.11 Other End-Use Industries

10 GLOBAL PASSIVE ELECTRONIC COMPONENTS MARKET, BY GEOGRAPHY

- 10.1 North America
 - 10.1.1 United States

- 10.1.2 Canada
- 10.1.3 Mexico
- 10.2 Europe
 - 10.2.1 United Kingdom
 - 10.2.2 Germany
 - 10.2.3 France
 - 10.2.4 Italy
 - 10.2.5 Spain
 - 10.2.6 Netherlands
 - 10.2.7 Belgium
 - 10.2.8 Sweden
 - 10.2.9 Switzerland
 - 10.2.10 Poland
 - 10.2.11 Rest of Europe
- 10.3 Asia Pacific
 - 10.3.1 China
 - 10.3.2 Japan
 - 10.3.3 India
 - 10.3.4 South Korea
 - 10.3.5 Australia
 - 10.3.6 Indonesia
 - 10.3.7 Thailand
 - 10.3.8 Malaysia
 - 10.3.9 Singapore
 - 10.3.10 Vietnam
 - 10.3.11 Rest of Asia Pacific
- 10.4 South America
 - 10.4.1 Brazil
 - 10.4.2 Argentina
 - 10.4.3 Colombia
 - 10.4.4 Chile
 - 10.4.5 Peru
 - 10.4.6 Rest of South America
- 10.5 Rest of the World (RoW)
 - 10.5.1 Middle East
 - 10.5.1.1 Saudi Arabia
 - 10.5.1.2 United Arab Emirates
 - 10.5.1.3 Qatar
 - 10.5.1.4 Israel

- 10.5.1.5 Rest of Middle East
- 10.5.2 Africa
 - 10.5.2.1 South Africa
 - 10.5.2.2 Egypt
 - 10.5.2.3 Morocco
 - 10.5.2.4 Rest of Africa

11 STRATEGIC MARKET INTELLIGENCE

- 11.1 Industry Value Network and Supply Chain Assessment
- 11.2 White-Space and Opportunity Mapping
- 11.3 Product Evolution and Market Life Cycle Analysis
- 11.4 Channel, Distributor, and Go-to-Market Assessment

12 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 12.1 Mergers and Acquisitions
- 12.2 Partnerships, Alliances, and Joint Ventures
- 12.3 New Product Launches and Certifications
- 12.4 Capacity Expansion and Investments
- 12.5 Other Strategic Initiatives

13 COMPANY PROFILES

- 13.1 Murata Manufacturing Co., Ltd.
- 13.2 TDK Corporation
- 13.3 KYOCERA AVX Components Corporation
- 13.4 Yageo Corporation
- 13.5 Vishay Intertechnology, Inc.
- 13.6 KEMET Corporation (YAGEO Group)
- 13.7 Taiyo Yuden Co., Ltd.
- 13.8 Samsung Electro-Mechanics Co., Ltd.
- 13.9 Walsin Technology Corporation
- 13.10 Nichicon Corporation
- 13.11 Rubycon Corporation
- 13.12 Panasonic Industry Co., Ltd.
- 13.13 Bourns, Inc.
- 13.14 Coilcraft, Inc.
- 13.15 W?rth Elektronik GmbH & Co. KG

13.16 ROHM Co., Ltd.

List Of Tables

LIST OF TABLES

Table 1 Global Passive Electronic Components Market Outlook, By Region
(2023–2034) (\$MN)

Table 2 Global Passive Electronic Components Market Outlook, By Component Type
(2023–2034) (\$MN)

Table 3 Global Passive Electronic Components Market Outlook, By Capacitors
(2023–2034) (\$MN)

Table 4 Global Passive Electronic Components Market Outlook, By Ceramic Capacitors
(2023–2034) (\$MN)

Table 5 Global Passive Electronic Components Market Outlook, By Aluminum
Electrolytic Capacitors (2023–2034) (\$MN)

Table 6 Global Passive Electronic Components Market Outlook, By Tantalum
Capacitors (2023–2034) (\$MN)

Table 7 Global Passive Electronic Components Market Outlook, By Film Capacitors
(2023–2034) (\$MN)

Table 8 Global Passive Electronic Components Market Outlook, By Supercapacitors
(2023–2034) (\$MN)

Table 9 Global Passive Electronic Components Market Outlook, By Mica & Paper
Capacitors (2023–2034) (\$MN)

Table 10 Global Passive Electronic Components Market Outlook, By Resistors
(2023–2034) (\$MN)

Table 11 Global Passive Electronic Components Market Outlook, By Fixed Resistors
(2023–2034) (\$MN)

Table 12 Global Passive Electronic Components Market Outlook, By Variable Resistors
(2023–2034) (\$MN)

Table 13 Global Passive Electronic Components Market Outlook, By Thermistors
(2023–2034) (\$MN)

Table 14 Global Passive Electronic Components Market Outlook, By Varistors
(2023–2034) (\$MN)

Table 15 Global Passive Electronic Components Market Outlook, By Inductors
(2023–2034) (\$MN)

Table 16 Global Passive Electronic Components Market Outlook, By Power Inductors
(2023–2034) (\$MN)

Table 17 Global Passive Electronic Components Market Outlook, By RF Inductors
(2023–2034) (\$MN)

Table 18 Global Passive Electronic Components Market Outlook, By Multilayer

Inductors (2023–2034) (\$MN)

Table 19 Global Passive Electronic Components Market Outlook, By Chokes
(2023–2034) (\$MN)

Table 20 Global Passive Electronic Components Market Outlook, By Transformers
(2023–2034) (\$MN)

Table 21 Global Passive Electronic Components Market Outlook, By Ferrite Beads
(2023–2034) (\$MN)

Table 22 Global Passive Electronic Components Market Outlook, By EMI/RFI Filters
(2023–2034) (\$MN)

Table 23 Global Passive Electronic Components Market Outlook, By Crystal
Resonators (2023–2034) (\$MN)

Table 24 Global Passive Electronic Components Market Outlook, By Oscillators
(2023–2034) (\$MN)

Table 25 Global Passive Electronic Components Market Outlook, By Other Passive
Components (2023–2034) (\$MN)

Table 26 Global Passive Electronic Components Market Outlook, By Material
(2023–2034) (\$MN)

Table 27 Global Passive Electronic Components Market Outlook, By Ceramic
(2023–2034) (\$MN)

Table 28 Global Passive Electronic Components Market Outlook, By Aluminum
(2023–2034) (\$MN)

Table 29 Global Passive Electronic Components Market Outlook, By Tantalum
(2023–2034) (\$MN)

Table 30 Global Passive Electronic Components Market Outlook, By Film (2023–2034)
(\$MN)

Table 31 Global Passive Electronic Components Market Outlook, By Ferrite
(2023–2034) (\$MN)

Table 32 Global Passive Electronic Components Market Outlook, By Carbon
(2023–2034) (\$MN)

Table 33 Global Passive Electronic Components Market Outlook, By Metal Alloy
(2023–2034) (\$MN)

Table 34 Global Passive Electronic Components Market Outlook, By Silicon-Based
Dielectric Materials (2023–2034) (\$MN)

Table 35 Global Passive Electronic Components Market Outlook, By Other Materials
(2023–2034) (\$MN)

Table 36 Global Passive Electronic Components Market Outlook, By Mounting
Technology (2023–2034) (\$MN)

Table 37 Global Passive Electronic Components Market Outlook, By Surface Mount
Technology (SMT) (2023–2034) (\$MN)

Table 38 Global Passive Electronic Components Market Outlook, By Through-Hole Technology (THT) (2023–2034) (\$MN)

Table 39 Global Passive Electronic Components Market Outlook, By Application (2023–2034) (\$MN)

Table 40 Global Passive Electronic Components Market Outlook, By Power Management (2023–2034) (\$MN)

Table 41 Global Passive Electronic Components Market Outlook, By Signal Filtering (2023–2034) (\$MN)

Table 42 Global Passive Electronic Components Market Outlook, By Signal Conditioning (2023–2034) (\$MN)

Table 43 Global Passive Electronic Components Market Outlook, By Timing and Frequency Control (2023–2034) (\$MN)

Table 44 Global Passive Electronic Components Market Outlook, By Energy Storage (2023–2034) (\$MN)

Table 45 Global Passive Electronic Components Market Outlook, By Electromagnetic Interference (EMI) Suppression (2023–2034) (\$MN)

Table 46 Global Passive Electronic Components Market Outlook, By Circuit Protection (2023–2034) (\$MN)

Table 47 Global Passive Electronic Components Market Outlook, By End-Use Industry (2023–2034) (\$MN)

Table 48 Global Passive Electronic Components Market Outlook, By Consumer Electronics (2023–2034) (\$MN)

Table 49 Global Passive Electronic Components Market Outlook, By Automotive (2023–2034) (\$MN)

Table 50 Global Passive Electronic Components Market Outlook, By Industrial Electronics (2023–2034) (\$MN)

Table 51 Global Passive Electronic Components Market Outlook, By Telecommunications (2023–2034) (\$MN)

Table 52 Global Passive Electronic Components Market Outlook, By Aerospace & Defense (2023–2034) (\$MN)

Table 53 Global Passive Electronic Components Market Outlook, By Healthcare (2023–2034) (\$MN)

Table 54 Global Passive Electronic Components Market Outlook, By Energy & Power (2023–2034) (\$MN)

Table 55 Global Passive Electronic Components Market Outlook, By IT & Data Centers (2023–2034) (\$MN)

Table 56 Global Passive Electronic Components Market Outlook, By Railways (2023–2034) (\$MN)

Table 57 Global Passive Electronic Components Market Outlook, By Marine

(2023–2034) (\$MN)

Table 58 Global Passive Electronic Components Market Outlook, By Other End-Use Industries (2023–2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) Regions are also represented in the same manner as above.

I would like to order

Product name: Passive Electronic Components Market Forecasts to 2034 – Global Analysis By Component Type (Capacitors, Resistors, Inductors, Transformers, Ferrite Beads, EMI/RFI Filters, Crystal Resonators, Oscillators, and Other Passive Components), Material, Mounting Technology, Application, End-Use Industry, and By Geography

Product link: <https://marketpublishers.com/r/P85504806265EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/P85504806265EN.html>