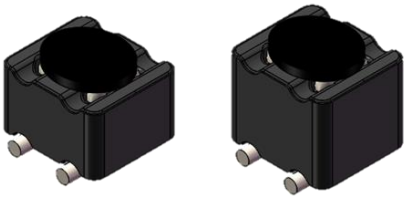
NEWS RELEASE

New Product: Noise Suppression Ferrite Beads 'PRBG Series'



Sagami Elec Co., Ltd. is pleased to announce the development of the noise suppression ferrite beads '**PRBG Series**' (W3.8 mm × D4.3 mm × H3.2 mm or H3.9 mm), with sample now available.

In recent years, electronic circuits for automotive and industrial applications have continued to evolve toward higher performance and greater miniaturization, driving the need for increased functional integration within limited PCB space. At the same time, growing noise generated by motors and high-speed digital circuits has made reliable EMC countermeasures in the high-frequency range increasingly critical. As a result, compact, high-reliability noise filters have become essential components that significantly impact design flexibility and overall product competitiveness.

The **PRBG Series** is designed as a component for automotive small DC motors, achieving both **high impedance performance and high current** capability across a frequency range from **several hundred MHz to 3 GHz,** including parts of the **5G/LTE bands.**

By integrating two independent ferrite beads into a single package, the **PRBG Series** significantly **reduces PCB mounting area**. In addition, compliance with **AEC-Q200** and a wide operating temperature **range of –40°C to +150°C** (including s

elf-heating) ensure high reliability and stable performance even under harsh auto motive operating conditions.

Not limited to automotive applications, the **PRBG Series** can also be widely used as an **EMC countermeasure** component for **high-frequency and high-current l ines**, contributing to compliance with various **CISPR standards.**

Main Applications:

Automotive small DC motors

EMC noise suppression

Features:

Integrated structure with two independent ferrite beads

High impedance and high current capability from 100 MHz to 3 GHz

Reduced mounting area

AEC-Q200 compliant

Operating temperature range: −40°C to +150°C (including self-heating)

Electrical Characteristics:

Part Number	Impedance (Ω) min.	DCR (mΩ)		Temperature Rise Allowable Current (A)
		Max	Typical	
PRBG4029C	22	0.73	0.67	12.3
PRBG4036C	37	0.93	0.85	12.0

Impedance Measurement Conditions:

100MHz, 0.1V

Allowable Current for Temperature Rise:

Current value at which the core surface temperature rises by 40°C.

Sagami Elec Co., Ltd. will continue to expand its product lineup to address evolving market needs and to support a wide range of solutions.

Product Details:

http://www.sagami-elec.co.jp/en/product/list.php?sagamiPartsNo=PRBG&srchtype=nm

Contact:

For inquiries regarding this product, including quotations and sample requests, please contact us via the inquiry form.