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Knowles Precision Devices extends V-Series single layer capacitor product line

New 100nF capacitor enables improved bypass performance in GaN and GaAs amplifier applications

CAZENOVIA, N.Y. – <u>Knowles Precision Devices</u>, a division of Knowles Corporation, recently announced the release of a new 100nF capacitor within its V-Series of single layer capacitors. The 100nF is a high frequency, wire bondable single layer capacitor, making it ideally suited for GaN and GaAs amplifier applications where small size and microwave performance are critical.

"We are thrilled to extend our V-Series product family and introduce the 100nF, which offers improved bypass performance and circuit integration for our customers," said Ian Tovar, product manager, Knowles Precision Devices. "The small footprint, along with X7R temperature stability and wire bondability, of the 100nF are integral to a well-performing circuit."

V-Series single layer capacitors, including the new 100nF, are designed to offer higher capacitance in a smaller footprint. The 100nF leverages class II dielectric material with X7R characteristics for DC blocking and RF bypassing in a broad frequency range. Additional uses include filtering, tuning and coupling applications. The 100nF features X7R temperature stability, is RoHS compliant and offers the best possible moisture sensitivity level (MSL-1). It has a high capacitance density and can be attached using conductive epoxy or be AuSn solder mounted.

In RF bypassing applications, the 100nF can help eliminate supply line noise. High frequency monolithic microwave integrated circuit (MMIC) amplifiers with broadband gain need to be protected from RF noise on supply lines. Supply noise can mix with RF signals, impacting signal-to-noise ratios and potentially causing spurious output. A bypass capacitor provides an efficient path to ground for RF energy on the supply line before it enters a gain stage.

Leveraging 50-plus years of industry knowledge and expertise, Knowles Precision Devices has a proven heritage of designing high reliability capacitors for demanding applications. The company's single layer capacitors support microwave and mmWave applications up to 100GHz and are widely used in support of general DC blocking, low-noise amplifiers, power amplifiers and high-power amplifiers, oscillators and filters.

Knowles Precision Devices is a leading global innovator and manufacturer of high-performance specialty components, capacitors and microwave products for use in critical applications in 5G, military,

medical and electric vehicle market segments. To learn more about Knowles Precision Devices, including its V-Series of single layer capacitors, visit <u>knowlescapacitors.com</u>.

About Knowles Precision Devices: Knowles Precision Devices is a division of Knowles Corporation (NYSE: KN). Headquartered in Cazenovia, New York, the company's sub-brands include Dielectric Laboratories, Compex, Johanson Manufacturing, Novacap, Syfer and Voltronics. For more information, visit www.knowlescapacitors.com or follow Knowles Precision Devices on LinkedIn.

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