

1214GN

Class AB GaN-on-SiC HEMT Transistors

New High Efficiency and Power Density 120 W Driver and 750 W Output Stage GaN Transistor Products for 1200 MHz -1400 MHz L-Band Radar Pulsed Power Transmitters

The 1214GN-120E/EL/EP and 1214GN-750V 50 V common source, Class AB Gan-on-SiC HEMT transistors are specially designed for L-band pulsed radar applications.

The 1214GN-120E/EL/EP driver transistor products deliver 120 W minimum pulsed output power with 17.5 dB typical power gain the across the 1200 MHz to 1400 MHz band under 300 μ s to 3 ms pulse width and 10% to 30% duty cycle pulsing formats.

The 1214GN-120EP product is a compact 1.200" x 0.600" x "0.150" 50 Ω IN/OUT plug-and-play pallet.

The 1214GN-750V output stage power transistor delivers 750 W minimum pulsed output power

with 17.6 dB typical power gain across the 1200 MHz to 1400 MHz band under 300 µs pulse width and 10% duty cycle pulsing format.

Each of the transistor products are hermetically sealed and are internally pre-matched for optimal performance. All gold metallization and eutectic die attach are utilized to provide the highest reliability and superior ruggedness.

The 1214GN-120E/EL/EP GaN transistor products are available in the 55-QQ, 55-QQP, and 55-78027 case styles.

The 1214GN-750V is available in the 55-Q03 case style.

For product sales or technical information contact <u>sales.</u> <u>support@microsemi.com</u>

Microsemi offers a complete family of continuous wave (CW) and pulsed RF and Microwave Silicon Bipolar Junction transistor and GaN-on-SiC HEMT transistor products up to 1400 W to provide system design solutions for HF, VHF, UHF, and L/S/C-band primary and secondary radar, communications, Industrial-Scientific-Medical (ISM), and Space applications.



1214GN-120E 0.160" x 0.550" 55-QQ



1214GN-120EL 0.160" x 0.230" 55-QQP



1214GN-120EP 0.600" x 1.200" x 0.150" 55-78027



1214GN-750V 0.385" x 1.030" 55-Q03

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