

# 1416GN

## Class AB GaN-on-SiC HEMT Transistors

### New High Efficiency and Power Density 120 W Driver and 600 W Output Stage GaN Transistor Products for 1400-1600 MHz Pulsed Power Transmitters

The 1416GN-120E/EL/EP and 1416GN-600V are 50 V common source Class AB GaN on SiC high electron mobility transistor (HEMT) products that are ideal for L-band radar, avionics, and communications applications.

The 1416GN-120E/EL/EP driver transistor products deliver 120 W minimum pulsed RF output power with 17.2 dB typical power gain across the 1400 MHz to 1600 MHz band under 300  $\mu$ s pulse width and 10% duty cycle pulsing format.

The 1416GN-120EP product is a compact 1.200" x 0.600" x "0.150" 50 $\Omega$  IN/OUT plug-and-play pallet.

The 1416GN-600V transistor model delivers 600 W minimum pulsed RF output power with 17.4 dB typical power gain across

the 1400 MHz to 1600 MHz band under 300  $\mu$ s 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 1416GN-120E/EL/EP GaN transistor products are available in the 55-QQ, 55-QQP, and 55-78028 case styles.

The 1416GN-600V is available in the 55-KR case style.

For product sales or technical information contact [sales.support@microsemi.com](mailto:sales.support@microsemi.com)

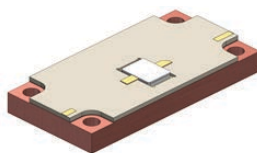
Microsemi offers a complete family of continuous wave (CW) and pulsed RF and Microwave Silicon Bipolar Junction transistor and GaN-on-SiC HEMT transistor products up to 1400 W to provide system design solutions for HF, VHF, UHF, and L/S/C-band primary and secondary radar, communications, Industrial-Scientific-Medical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



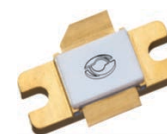
**1416GN-120E**  
**0.160" x 0.550"**  
**55-QQ**



**1416GN-120EL**  
**0.160" x 0.230"**  
**55-QQP**



**1416GN-120EP**  
**0.600" x 1.200" x 0.150"**  
**55-78028**



**1416GN-600V**  
**0.385" x 1.030"**  
**55-KR**

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