WF9800

**FEATURES**

- Dual-metal, 3 μm-thick interconnects
- Thin Film & Bulk Resistors
- MIM Capacitors >100 V
- Slot Substrate Vias
- Power FETs & Switch FETs

**BENEFITS**

- Global leader in GaN on SiC MMIC Technology
- World’s largest dedicated wide bandgap GaN facility
- Highest reliability in the industry
- Assistance, testing and support from initial development to volume production
- Extremely accurate design kits, scalable non-linear models

**APPLICATIONS**

- 2-way Private Radio
- CATV
- Test Instrumentation
- EW Jammers
- Radar
- Satellite Communications
- Military Communications
- Class A, AB, linear amplifiers suitable with OFDM, QPSK, QAM, FM waveforms

**ASK ABOUT THE GaN RF FOUNDRY ONLINE TRAINING COURSE.**

Wolfspeed is the leader in GaN on SiC MMIC Technology. We have the design assistance, proven process, testing, and support to realize your specifications from initial development to recurring production. Wolfspeed can do it with faster cycle times, higher first pass design success, and greater reliability than our competitors.

We offer non-linear, scalable GaN HEMT models and full PDKs for both AWR Microwave Office (MWO) and Keysight’s Advanced Design System (ADS).
### Processes

<table>
<thead>
<tr>
<th></th>
<th>G28V5 MMIC</th>
<th>G28V3 MMIC</th>
<th>G50V3 MMIC</th>
<th>G28V4 MMIC</th>
<th>G40V4 MMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate Length</td>
<td>0.15 μm</td>
<td>0.4 μm</td>
<td>0.4 μm</td>
<td>0.25 μm</td>
<td>0.25 μm</td>
</tr>
<tr>
<td>Bias</td>
<td>28 V</td>
<td>28 V</td>
<td>50 V</td>
<td>28 V</td>
<td>40 V</td>
</tr>
<tr>
<td>Breakdown</td>
<td>&gt;84 V</td>
<td>&gt;120 V</td>
<td>&gt;150 V</td>
<td>&gt;120 V</td>
<td>&gt;120 V</td>
</tr>
<tr>
<td>Density</td>
<td>3.75 W/mm</td>
<td>4.5 W/mm</td>
<td>8 W/mm</td>
<td>6 W/mm</td>
<td>6 W/mm</td>
</tr>
<tr>
<td>Performance</td>
<td>DC - 40 GHz</td>
<td>DC - 8 GHz</td>
<td>DC - 6 GHz</td>
<td>DC - 18 GHz</td>
<td>DC - 18 GHz</td>
</tr>
</tbody>
</table>

### Service Features

- Layout support and DRC
- Development lots in dedicated & shared mask options
- Electrical test services available
- Visual screening

### Circuit Types

- High power FET amplifiers
- Broadband amplifiers
- High efficiency amplifiers
- High IP3 amplifiers
- Multi-function integrated MMICs
- FET limiters
- High power FET switches
- High IP3 FET mixers
- Attenuators
- Phase Shifters
- Low noise amplifier

### Resistor Au Gate
- Source FP
- MIM Capacitor
- Dielectric X-over
- Substrate Via
- Semi-insulating 4H-SiC

**READY TO GET STARTED? VISIT WOLFSPEED.COM/RF/FOUNDRY-SERVICES OR CONTACT US AT FOUNDRY@WOLFSPEED.COM**