

5G

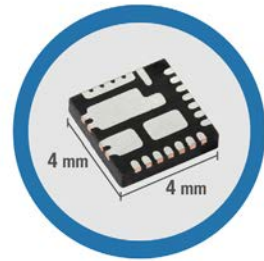
5G mm Wave Base Station Power Supplies
Highest Efficiency / RF Noise Levels

How to Enable the Highest Range and Best Reception

VISHAY

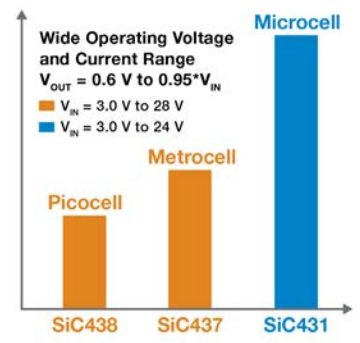
High Operating Temperature Range from -40 °C to +125 °C

INTERNALLY COMPENSATED WITH THE WIDEST OPERATING RANGE



microBUCK® DC/DC Converter
SiC431

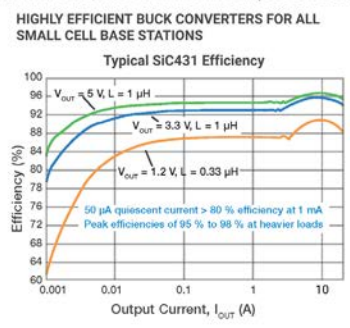
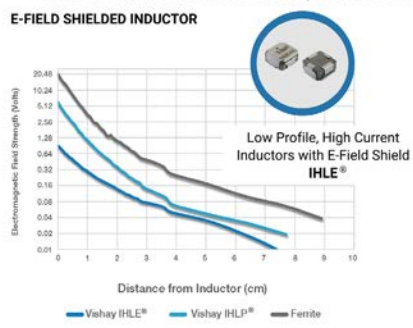
VERSATILE



- Low Profile, High Current Inductors With E-Field Shield IHLE®
- microBUCK® DC/DC Converter SiC437, SiC438
- Surface-Mount Multilayer Ceramic Chip Capacitors for High Frequencies MLCC HiQ Capacitors
- Flexible Ultrafast Platform for Power Supplies and Inverters FRED Pt® Series: 200 V to 600 V

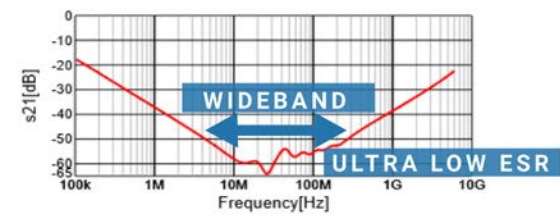
Power Supplies for 5G Small Cells

Picocell / Metrocell / Microcells Require 1 W / 5 W / 10 W of RF TX Power, i.e. 5 W to 100 W of Input DC Power



PSRR: Reject Spurious Switching by 50 dB

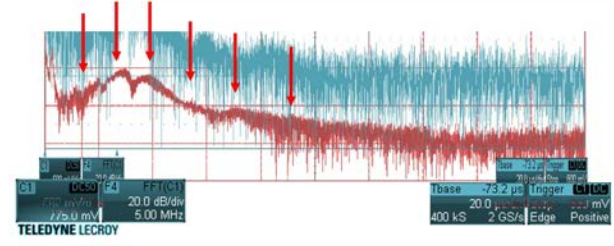
Achieve Wideband Filtering With Ultra Low ESR Filter Capacitors



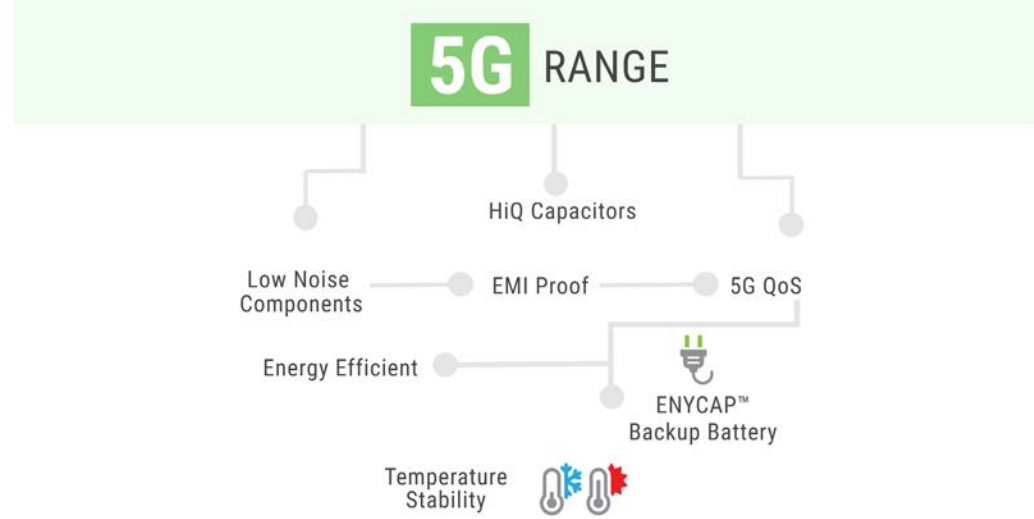
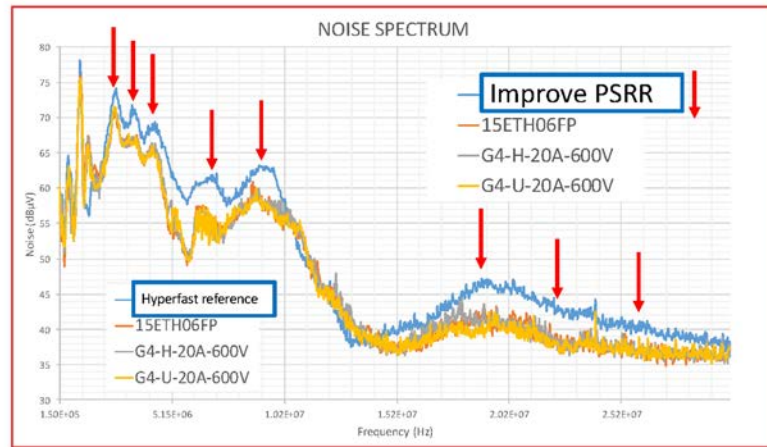
Surface-Mount Multilayer Ceramic Chip Capacitors for High Frequencies
MLCC HiQ Capacitors

Soft Recovery Diodes to Lower the RF Noise Floor for AC/DC SMPS

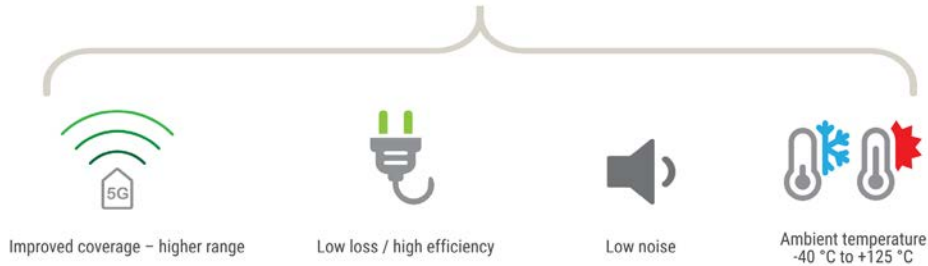
Soft Recovery Diodes to Improve PSRR and RF Noise Floor



FRED Pt® Series
200 V to 600 V



ADVANTAGES



ADVANTAGES of Dedicated Noise Suppressing Components

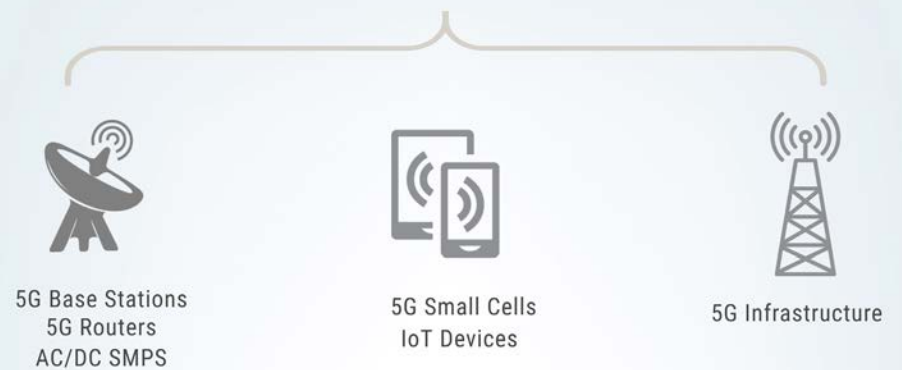
Improved EMI / PSRR (Power Supply Reject Ratio)

- Lower RF noise floor for higher range in RX
- Improves connectivity / QoS

Optimized Efficiency for 5G Small Cells

- 95 % to 98 % efficiency for pico + micro + metro cells
- Lower heat dissipation

APPLICATIONS



Need Technical Support? Email our Vishay Application Experts