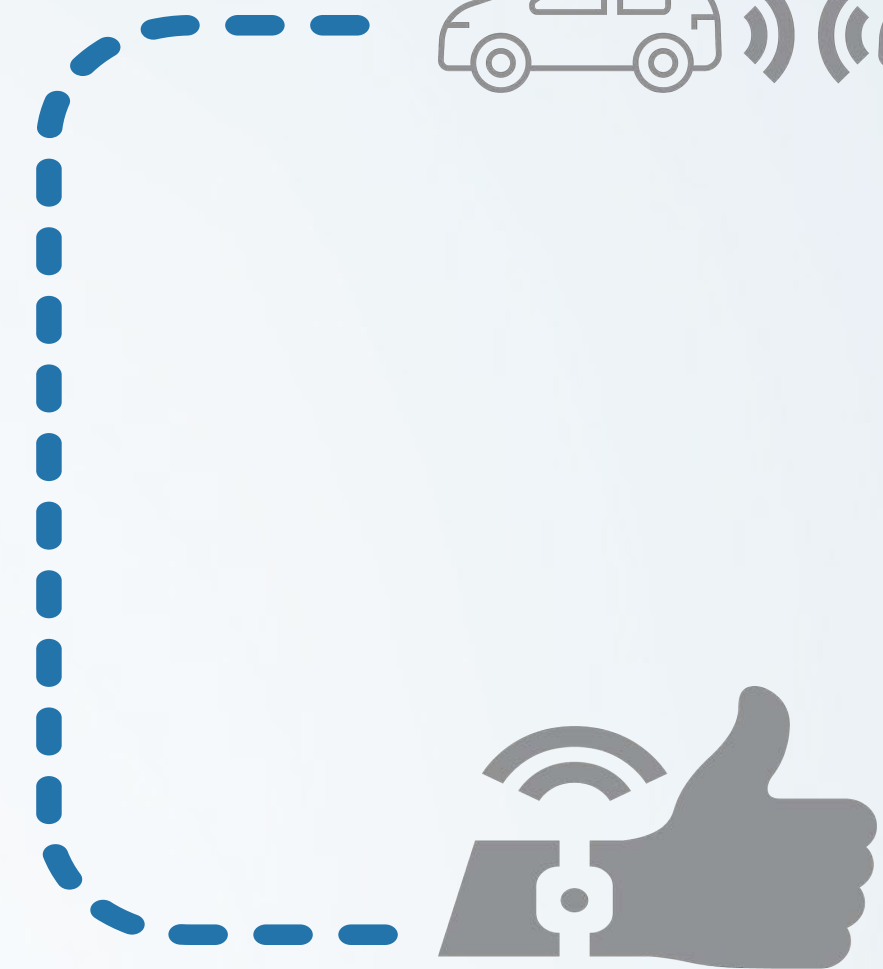
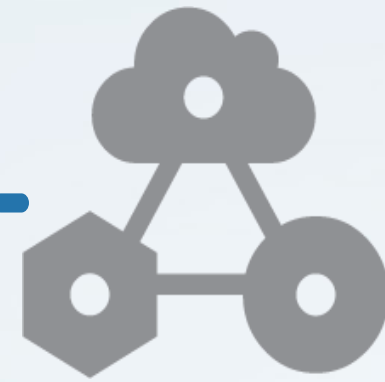
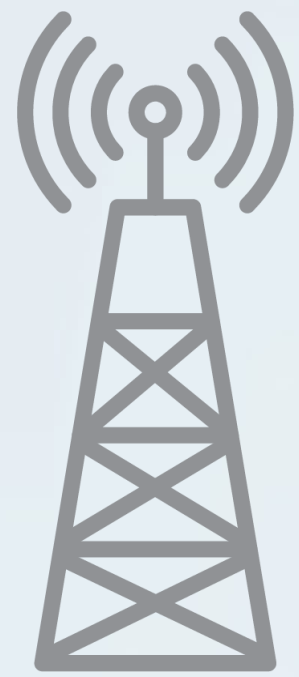
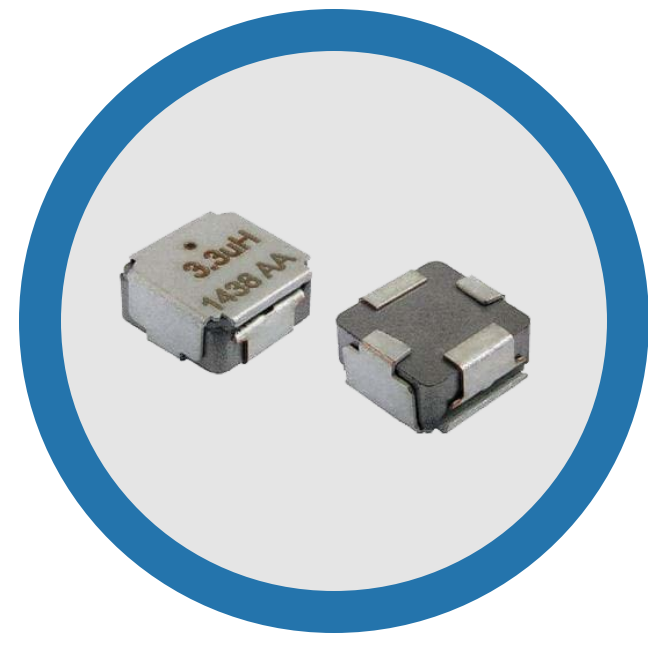


5G

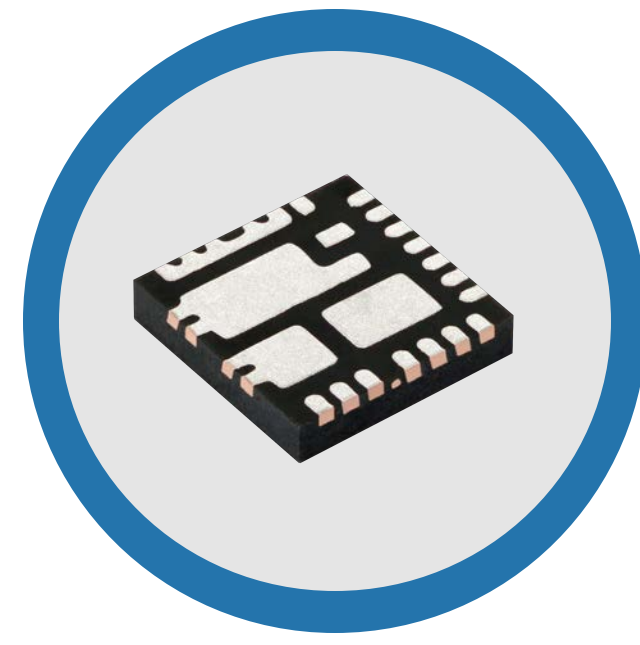
5G mm Wave Base Station
Power Supplies
Highest Efficiency / RF Noise Levels

How to Enable the Highest Range and Best Reception

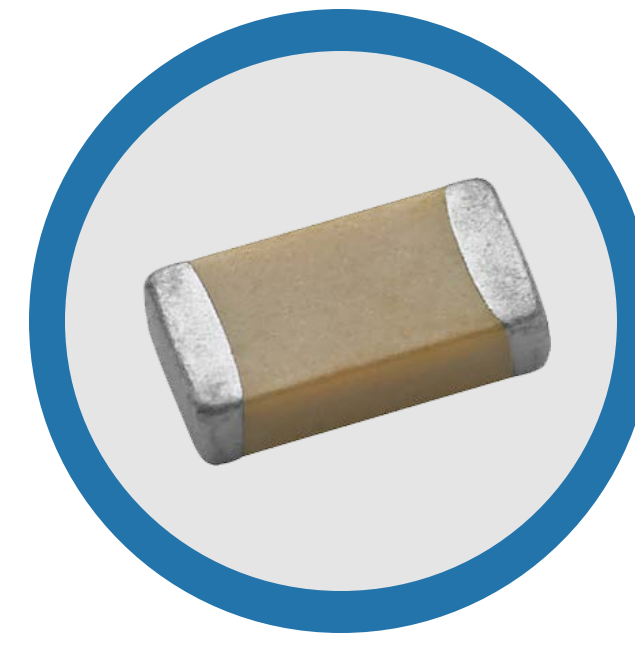




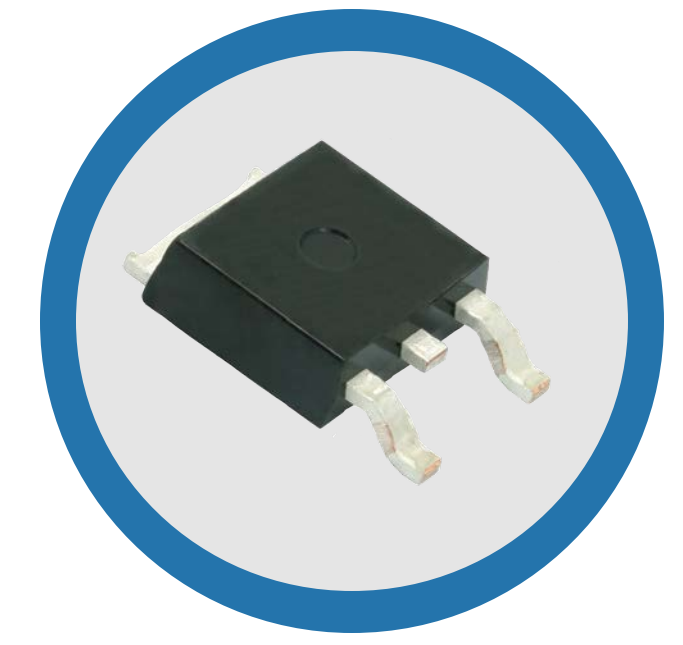
Low Profile,
High Current Inductors
With E-Field Shield
IHLE®



microBUCK® DC/
DC Converter
SiC437, SiC438



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

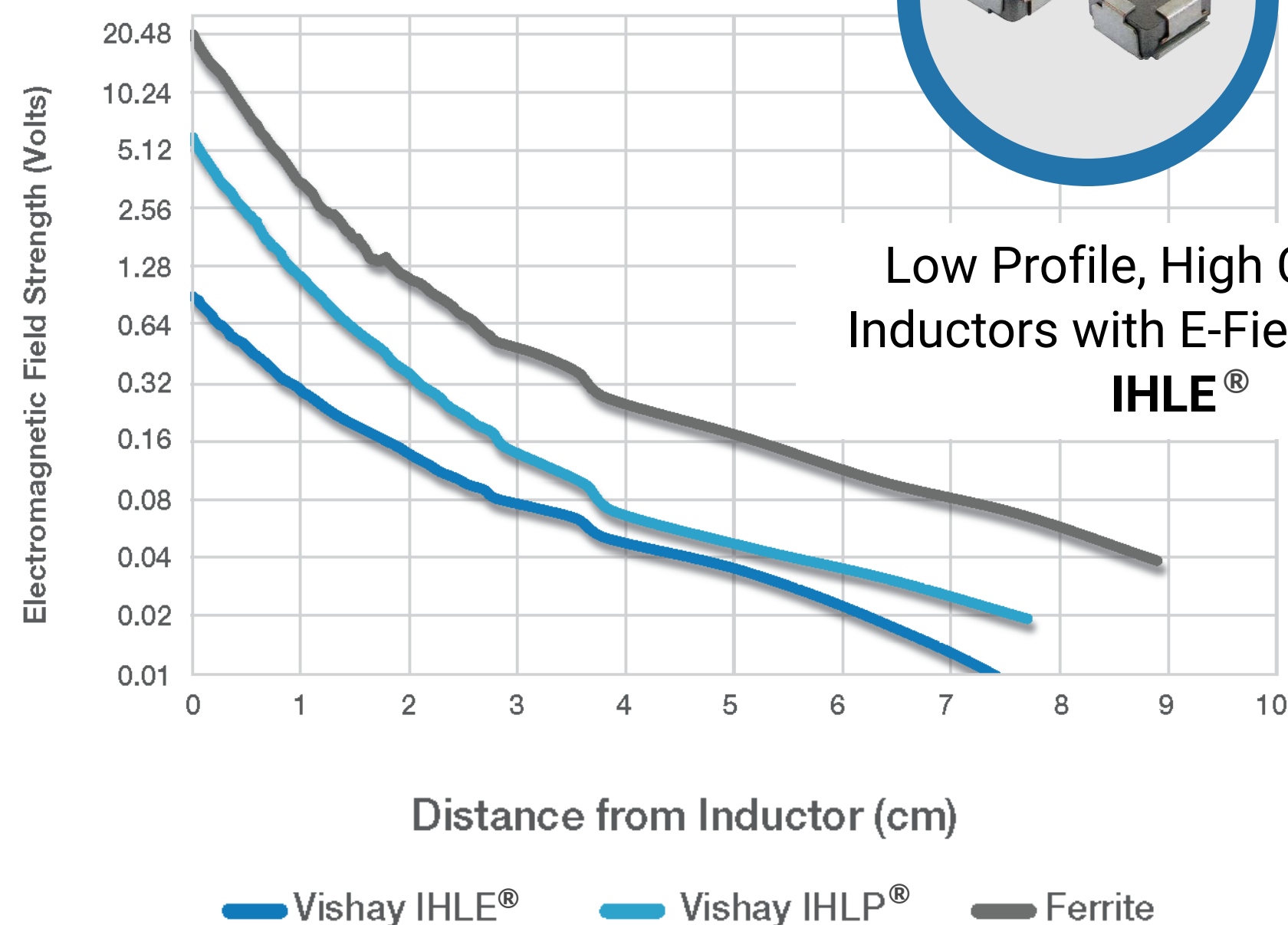


Flexible Ultrafast Platform for
Power Supplies and Inverters
FRED Pt® Series: 200 V to 600 V

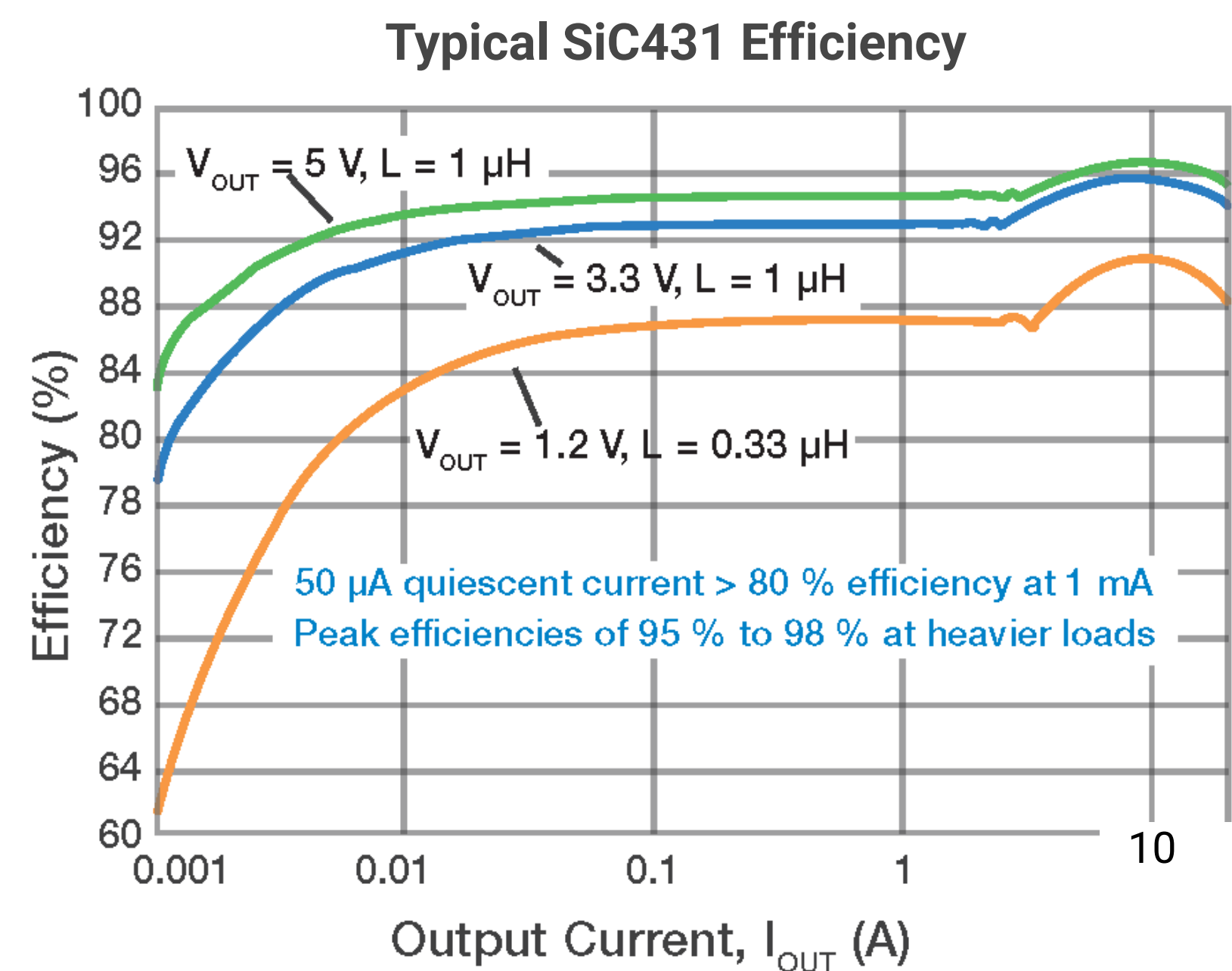
Power Supplies for 5G Small Cells

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

E-FIELD SHIELDED INDUCTOR

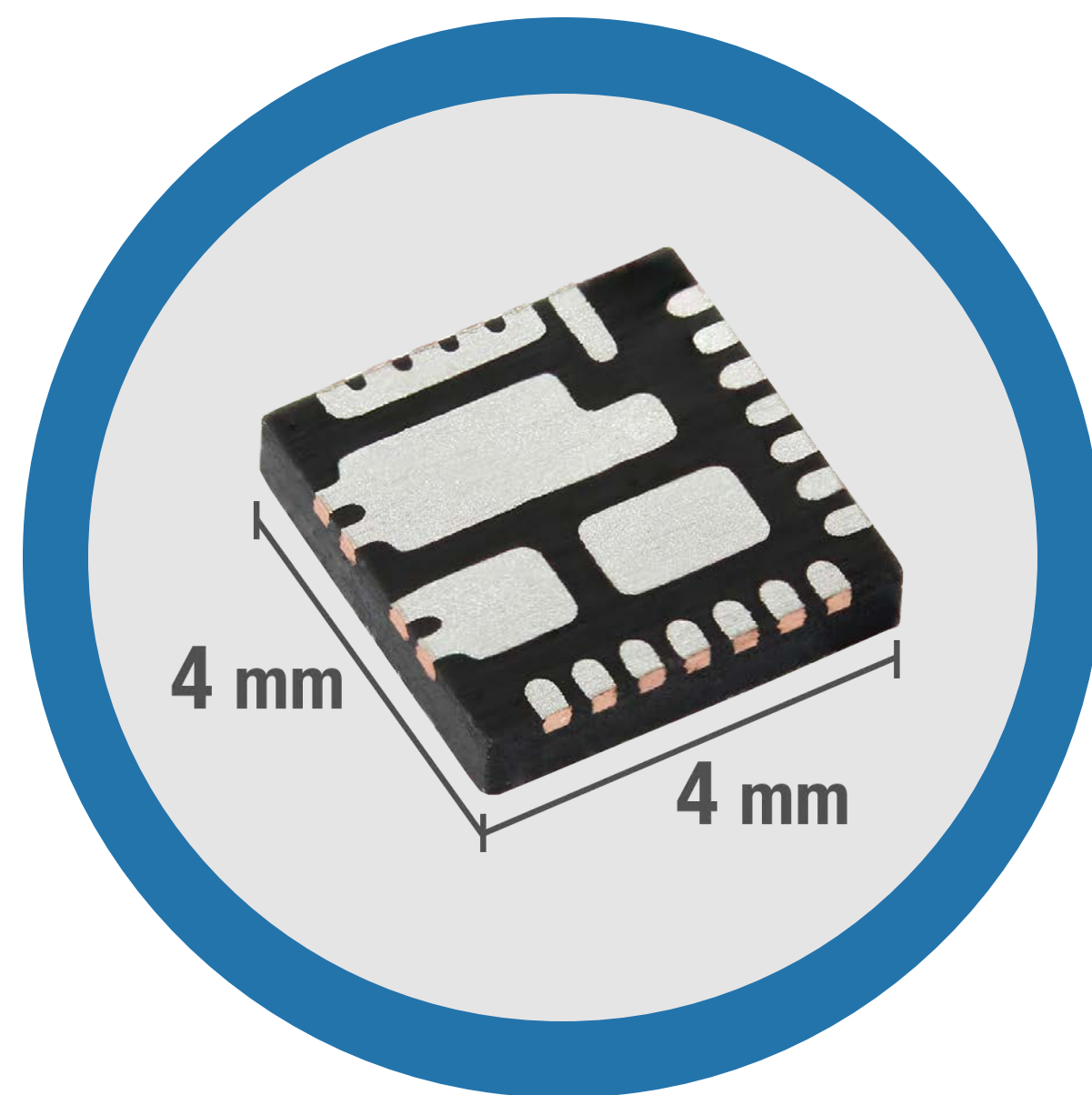


HIGHLY EFFICIENT BUCK CONVERTERS FOR ALL SMALL CELL BASE STATIONS



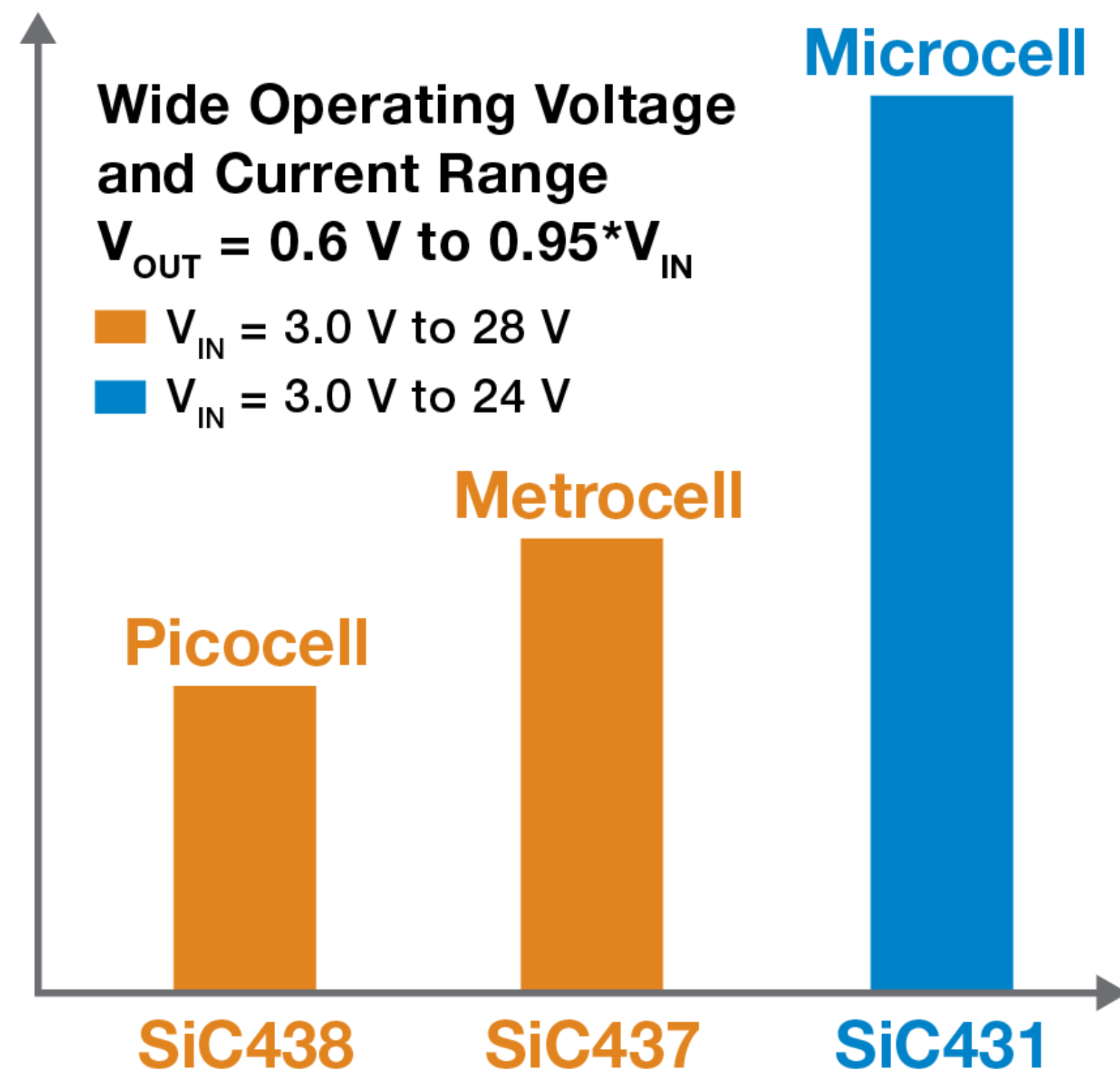
High Operating Temperature Range from -40 °C to +125 °C

INTERNALLY COMPENSATED WITH
THE WIDEST OPERATING RANGE



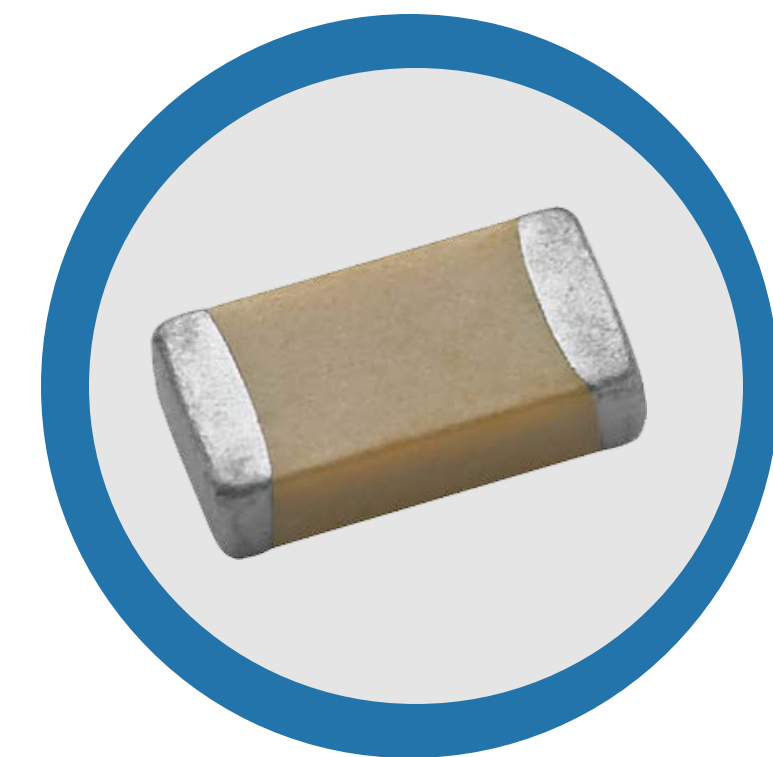
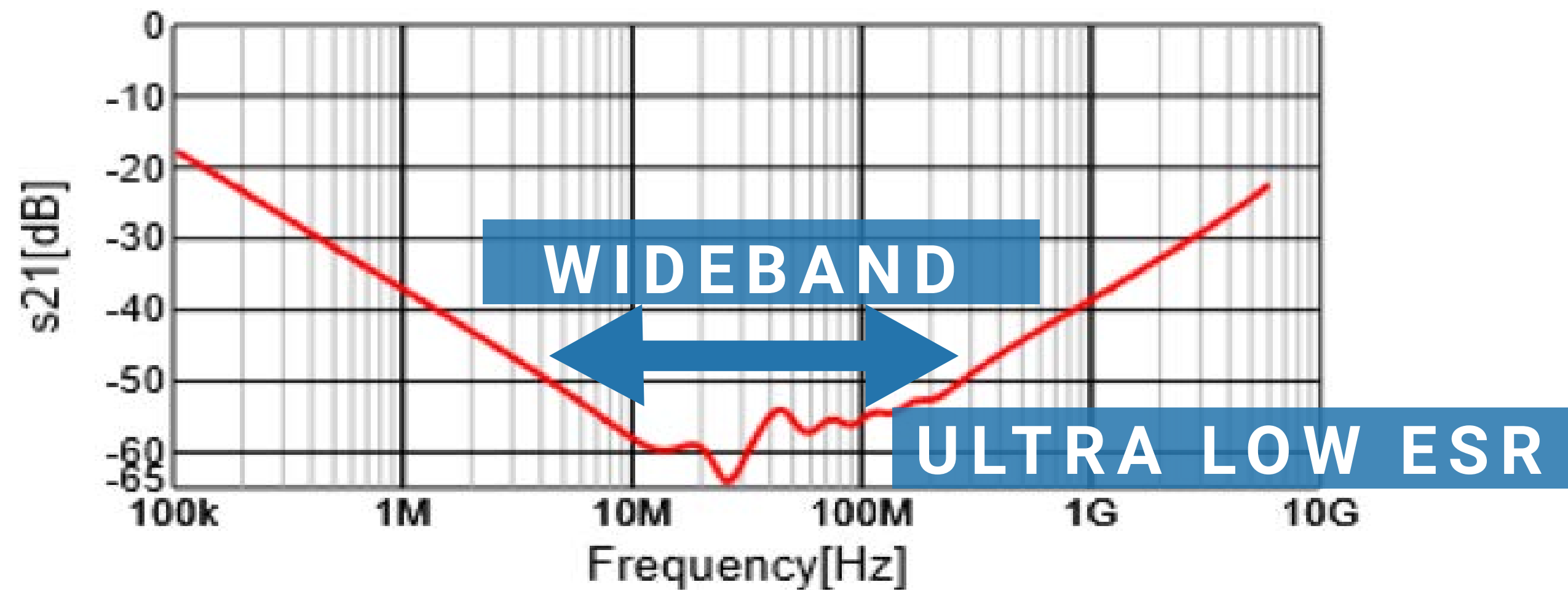
microBUCK[®] DC/DC Converter
SiC431

VERSATILE



PSRR: Reject Spurious Switching by 50 dB

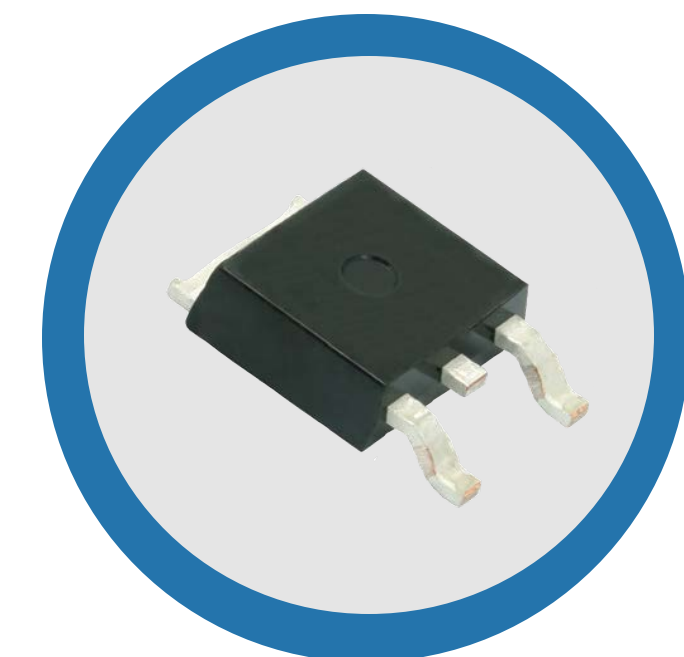
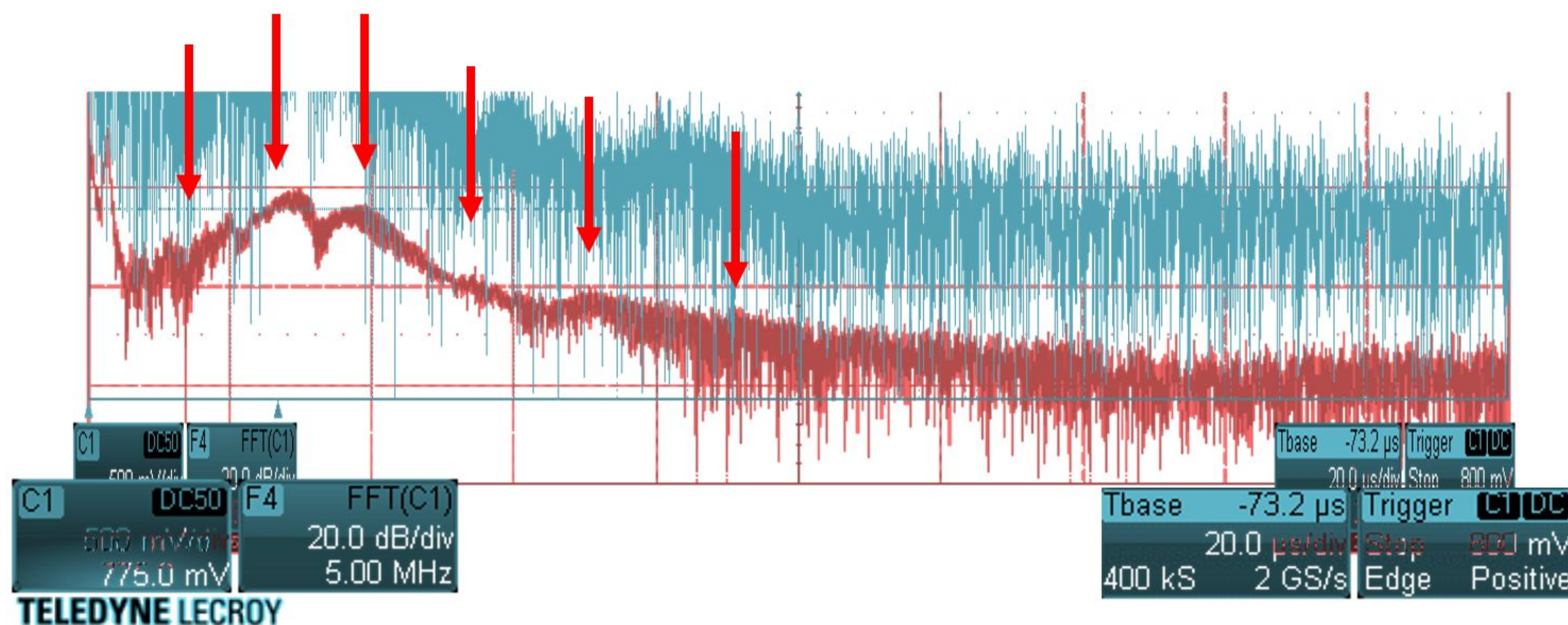
Achieve Wideband Filtering With Ultra Low ESR Filter Capacitors



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

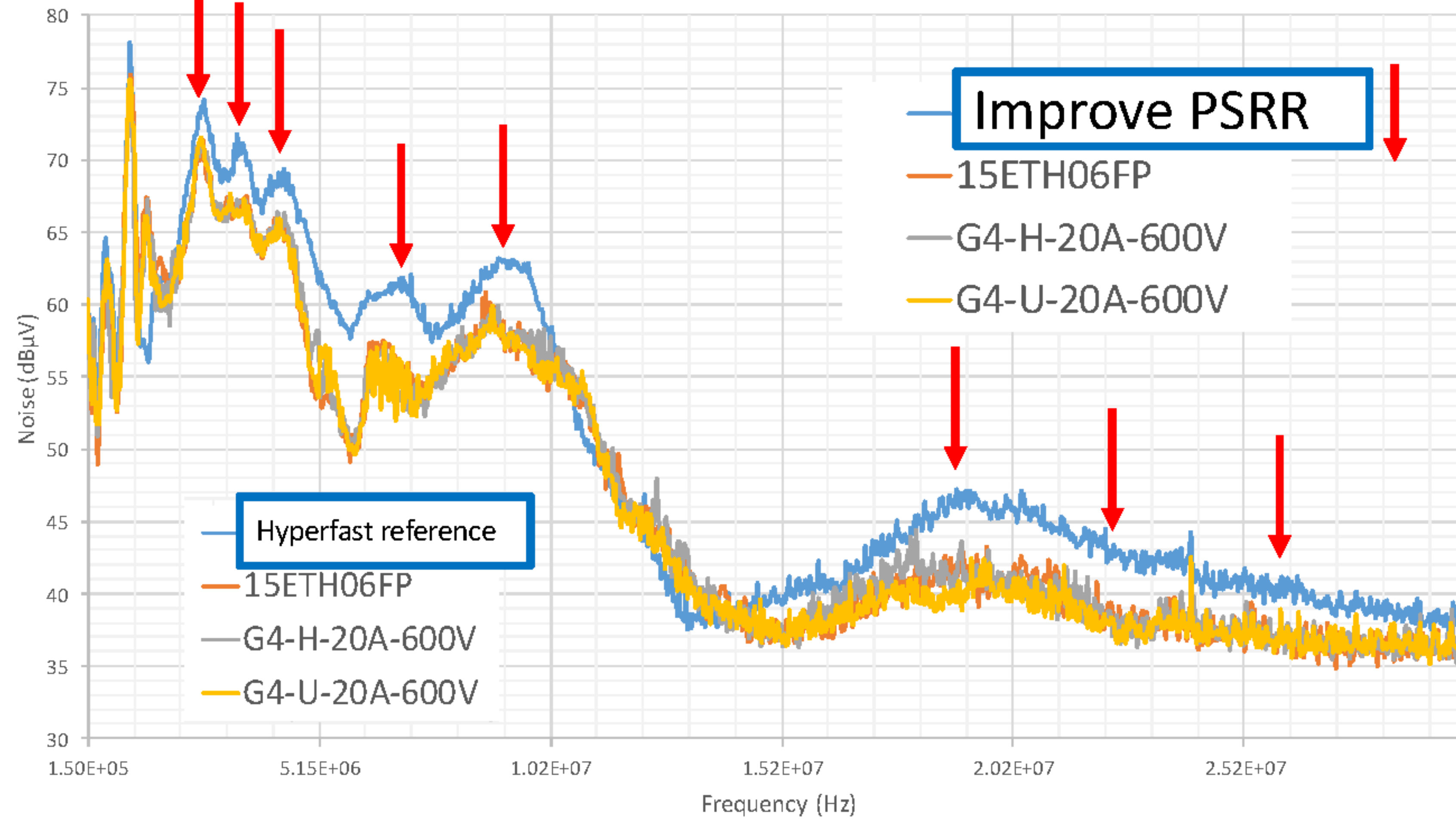
Soft Recovery Diodes to Lower the RF Noise Floor for AC/DC SMPS

Soft Recovery Diodes to Improve PSRR and RF Noise Floor

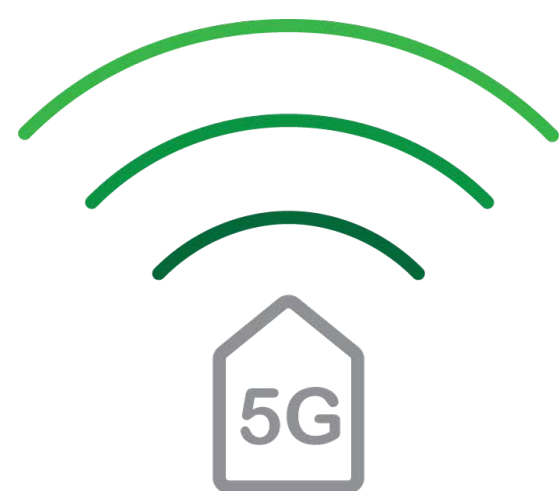


FRED Pt® Series
200 V to 600 V

NOISE SPECTRUM



ADVANTAGES



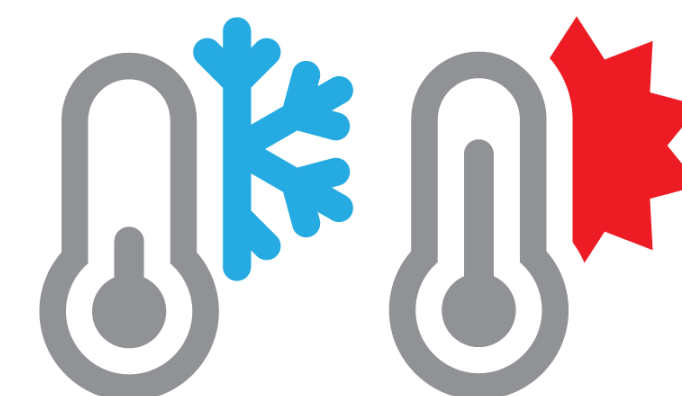
Improved coverage – higher range



Low loss / high efficiency



Low noise



Ambient temperature
-40 °C to +125 °C

ADVANTAGES of Dedicated Noise Suppressing Components

Improved EMI / PSRR (Power Supply Reject Ratio)

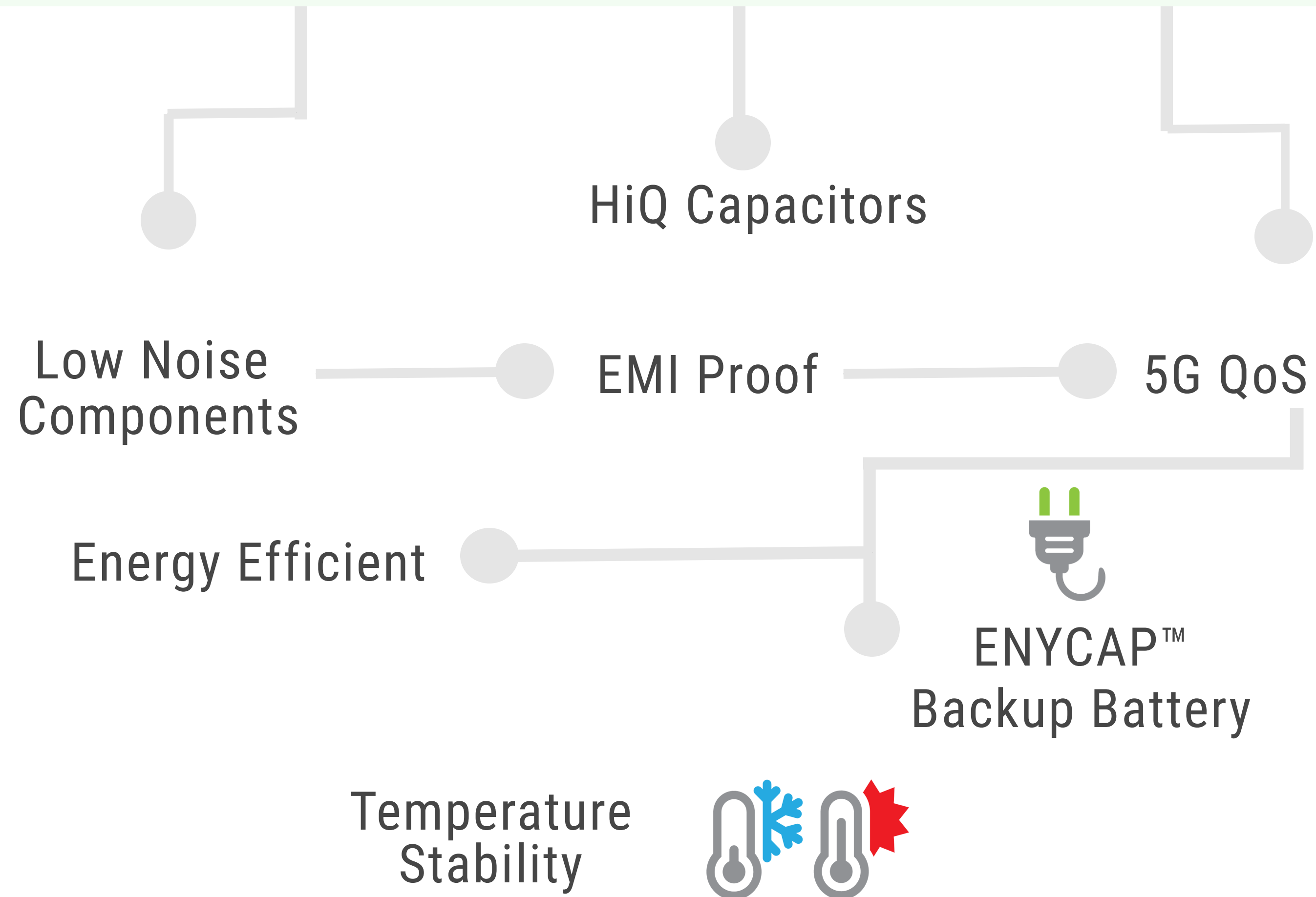
- Lower RF noise floor for higher range in RX
- Improves connectivity / QoS

Optimized Efficiency for 5G Small Cells

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



5G RANGE



APPLICATIONS



5G Base Stations
5G Routers
AC/DC SMPS



5G Small Cells
IoT Devices



5G Infrastructure



Need Technical Support? Email our Vishay Application Experts