

Optimized MOSFETs for Industrial Motor Control and Battery Powered Tool Applications



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SAN JOSE, Calif., March 1, 2021 /PRNewswire/ -- MaxPower Semiconductor, Inc. announces the full commercial availability of its Proprietary Advanced Trench MOSFETs that are optimized for industrial motor control applications. This 30V to 150V MaxFET™ family is designed for high current capability and to increase efficiency in both motor torque and battery life, which also supports high inductive load switching with low conduction and switching losses for efficient battery operation.

These devices have a demonstrated success in motor control applications for industrial devices. The combination of low on-resistance, high avalanche rating, and advanced packaging technologies create a range of ultra-rugged parts to fit today's design requirements for this growing market.

For example, the MXP40N1P0BGL, which is ideal for battery pack, load switching, and high efficiency DC/DC converter applications, features; typical on-resistance of 0.77mΩ at V_{gs} = 10V, maximum on-resistance of 1.0mΩ at V_{gs} = 10V, and typical gate charge of 63nC at V_{gs} = 4.5V over an operating temperature range of -55 to 150°C. Parts are available in all of the most requested, industry standard packages, such as PQFN 5x6, D-PAK, D2-PAK, and TO-220.

MaxPower also uses advanced packaging techniques, such as the implementation of Cu-clip, which helps to reduce the maximum junction temperature during operation and extend the

device's operation life and reliability. The Cu-clip also helps conduct heat to the package exterior and provides the option of two-sided cooling, all benefiting efforts toward advanced thermal management for smaller form factors.

"MaxPower's mission has always been to provide advanced MOSFETs that optimize our customers' end products and creating advantages in performance versus price. We have successfully developed our technology platform and products hand-in-hand with our Tier 1 customers across the globe and are excited to continue doing so!" – Dr. Mohamed Darwish, Co-Founder/CEO of MaxPower.

MaxPower Semiconductor, Inc. is a fabless, leading-edge power semiconductor company, which is dedicated to delivering innovative, cost-effective, and field-proven technologies and products that optimize Power Management Solutions. MaxPower is a privately held company with a strong and expansive IP portfolio, which was founded in 2008 by an internationally renowned team in the power technology industry. For more information, please visit www.maxpowersemi.com.

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