

Mid-Voltage Power MOSFETs Utilize Copper Clip Technology



International Rectifier today announced the expansion of its portfolio of HEXFET power MOSFETs to offer a complete family of mid-voltage devices available in a 5x6 mm PQFN package with optimized copper clip and solder die.

The new power MOSFETs, featuring IR’s latest silicon technology to deliver benchmark performance are designed for switching applications including DC to DC converters for network and telecom equipment, AC-DC Switch Mode Power Supplies (SMPS), and motor drive switches. Available in a wide range of voltages from 40 V to 250 V, the devices provide various levels of on-state resistance (RDS(on)) and gate charge (Qg) to offer customers optimized performance and cost for a given application.

“With a low 0.9 mm profile and industry standard pin out, the devices’ high current rating and low RDS(on) enable higher efficiency, power density and reliability compared to alternative solutions requiring multiple parallel parts, making them well suited to switching applications where board space is limited” said Hemal Shah, marketing manager for IR’s Power Management Devices Business Unit.

All of the devices feature low thermal resistance (<0.5 °C/W), are MSL1 industrial-qualified and RoHS compliant containing no lead, bromide or halogen.

Specifications

Part Number	Package	Voltage	Current	R _{DS(on)}	Q _g	Gate
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Published on Electronic Component News (<http://www.ecnmag.com>)

					Typ	
RFH5004TRPBF	POFN 5x6mm	30 V	100A	2.6 mΩ	3 nC	Standard
RFH5006TRPBF	POFN 5x6mm	30 V	100A	3.1 mΩ	7 nC	Standard
RFH5106TRPBF	POFN 5x6mm	30 V	100A	3.6 mΩ	8 nC	Standard
RFH5206TRPBF	POFN 5x6mm	30 V	80A	3.7 mΩ	10 nC	Standard
RFH5406TRPBF	POFN 5x6mm	30 V	80A	4.4 mΩ	23 nC	Standard
RFH5007TRPBF	POFN 5x6mm	75 V	100A	3.9 mΩ	35 nC	Standard
RFH5207TRPBF	POFN 5x6mm	75 V	71A	3.6 mΩ	39 nC	Standard
RFH5107TRPBF	POFN 5x6mm	100 V	100A	3.0 mΩ	35 nC	Standard
RFH5110TRPBF	POFN 5x6mm	100 V	33A	2.4 mΩ	38 nC	Standard
RFH5210TRPBF	POFN 5x6mm	100 V	35A	4.9 mΩ	39 nC	Standard
RFH5015TRPBF	POFN 5x6mm	50 V	66A	3.1 mΩ	33 nC	Standard
RFH5020TRPBF	POFN 5x6mm	200 V	21A	3.9 mΩ	36 nC	Standard
RLH504TRPBF	POFN 5x6mm	30 V	100A	2.4 mΩ max	33 nC	Logic Level
RLH506TRPBF	POFN 5x6mm	30 V	100A	2.4 mΩ max	34 nC	Logic Level
RLH500TRPBF	POFN 5x6mm	100 V	100A	3.0 mΩ max	34 nC	Logic Level

Datasheets and an application note for the devices are available on the website at: <http://www.inf.com>

Availability and Pricing

Pricing for the RFH5406TRPBF begins at US \$0.54 each in 10,000-unit quantities. Production orders are available immediately. Prices are subject to change.

Source URL (retrieved on 03/06/2015 - 1:14am):

<http://www.ecnmag.com/product-releases/2010/06/mid-voltage-power-mosfets-utilize-copper-clip-technology>