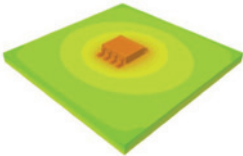


> LFPAK56D

the ultimate dual MOSFET

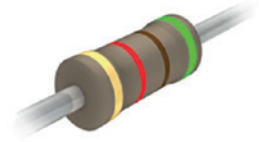
Perfect for saving space, the LFPAK56D packs two MOSFETs into a single package using Nexperia's cutting edge copper clip technology. The LFPAK56D is AEC-Q101 automotive qualified, and delivers best-in-class performance.

Thermal Performance



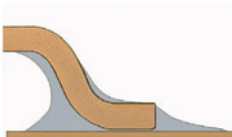
- > Copper clip technology
- > High power density
- > Small footprint

Ultra Low On-Resistance

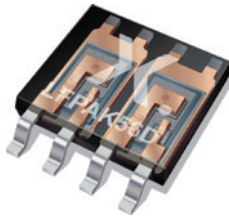


- > 5.8m Ω @ 40V
- > No internal wire bonds
- > Best-in-class performance

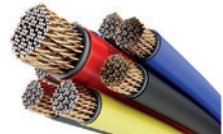
Reliable & Manufacturable



- > High board level reliability
- > Easy optical inspection
- > Robust solder joints

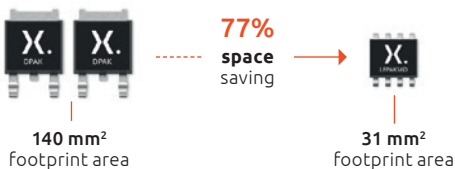


High Current Rating



- > Up to 40 A current rating
- > High transient robustness
- > Best-in-class performance

LFPAK56D Footprint Comparison



LFLPAK56D Product Range (AEC-Q101 qualified)

| Product Name | V_{DS} [max] (V) | R_{DSon} [max] @ $V_{GS} = 10\text{ V}$ (m Ω) | R_{DSon} [max] @ $V_{GS} = 5\text{ V}$ (m Ω) | I_D [max] (A) | $R_{th(j-mb)}$ [max] (K/W) |
|---------------|--------------------|--|---|-----------------|-------------------------------|
| BUK9K5R1-30E | 30 | 4.4 | 5.3 | 40 | 2.21 |
| BUK7K5R1-30E | 30 | 5.1 | | 40 | 2.21 |
| BUK9K5R6-30E | 30 | 4.7 | 5.8 | 40 | 2.36 |
| BUK7K5R6-30E | 30 | 5.6 | | 40 | 2.36 |
| BUK9K6R2-40E | 40 | 6 | 6.2 | 40 | 2.21 |
| BUK7K6R2-40E | 40 | 5.8 | | 40 | 2.21 |
| BUK9K6R8-40E | 40 | 6.1 | 7.2 | 40 | 2.36 |
| BUK7K6R8-40E | 40 | 6.8 | | 40 | 2.36 |
| BUK9K8R7-40E | 40 | 8 | 9.4 | 30 | 2.84 |
| BUK7K8R7-40E | 40 | 8.5 | | 30 | 2.84 |
| BUK9K18-40E | 40 | 16 | 19.5 | 30 | 3.96 |
| BUK7K18-40E | 40 | 19 | | 24.2 | 3.96 |
| BUK9K25-40E | 40 | 24 | 29 | 18.2 | 4.68 |
| BUK7K25-40E | 40 | 25 | | 27 | 4.68 |
| BUK9K12-60E | 60 | 10.7 | 11.5 | 35 | 2.21 |
| BUK7K12-60E | 60 | 9.3 | | 40 | 2.21 |
| BUK9K13-60E | 60 | 11.2 | 12.5 | 40 | 2.36 |
| BUK7K13-60E | 60 | 10 | | 40 | 2.36 |
| BUK9K17-60E | 60 | 15.6 | 17 | 26 | 2.84 |
| BUK7K17-60E | 60 | 14 | | 30 | 2.84 |
| BUK9K35-60E | 60 | 32 | 35 | 22 | 3.96 |
| BUK7K35-60E | 60 | 30 | | 20.7 | 3.96 |
| BUK9K52-60E | 60 | 49 | 55 | 16 | 4.68 |
| BUK7K52-60E | 60 | 45 | | 15.4 | 4.68 |
| BUK7K15-80E | 80 | 15 | | 23 | 2.21 |
| BUK9K20-80E | 80 | 17 | 20 | 23 | 2.21 |
| BUK7K17-80E | 80 | 17 | | 21 | 2.36 |
| BUK9K22-80E | 80 | 19 | 22 | 21 | 2.36 |
| BUK7K23-80E | 80 | 23 | | 17 | 2.84 |
| BUK9K30-80E | 80 | 26 | 30 | 17 | 2.84 |
| BUK9K29-100E | 100 | 27 | 29 | 30 | 2.21 |
| BUK7K29-100E | 100 | 24.5 | | 29.5 | 2.21 |
| BUK9K32-100E | 100 | 31 | 33 | 26 | 2.36 |
| BUK7K32-100E | 100 | 27.5 | | 29 | 2.36 |
| BUK9K45-100E | 100 | 42 | 45 | 21 | 2.84 |
| BUK7K45-100E | 100 | 37.6 | | 21.4 | 2.84 |
| BUK9K89-100E | 100 | 85 | 89 | 12.5 | 3.96 |
| BUK7K89-100E | 100 | 82.5 | | 13 | 3.96 |
| BUK9K134-100E | 100 | 154 | 159 | 8.5 | 4.68 |
| BUK7K134-100E | 100 | 121 | | 9.8 | 4.68 |

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