

# LFPAK P-Channel MOSFET

This program includes a series of P-channel MOSFETs in the popular LFPAK56 package

## Design benefits

- For high side drive no charge pump required
- Simple interface drive circuit
- Proven package technology LFPAK56 (SOT669)
- 100% footprint compatible to Power-SO8
- Superior reliability and quality

## Key technical features & portfolio

- Suitable for high temperature application - 175 °C  $T_j$  max
- Automotive quality grade AEC-Q101
- Low  $R_{DS(on)}$  version available
- Portfolio expansion planned

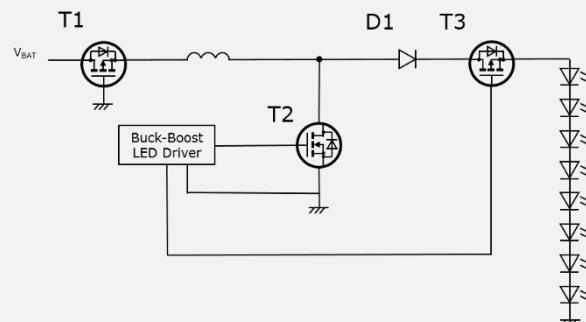
Part number	$V_{DS}$ (V)	$V_{GS}$ (V)	$R_{DS(on)}$ max (mΩ) @ $V_{GS} = 10$ V	$I_D$ [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
BUK6Y19-30P	30	20	19	45	2.3
BUK6Y14-40P	40	20	15	64	1.4
BUK6Y33-60P	60	20	33	38	1.4
BUK6Y61-60P	60	20	61	22	2.3
BUK6Y10-30P	30	20	10	80	1.4
BUK6Y24-40P	40	20	24	39	2.3

## Functions & applications

- Reverse battery protection
- Load switch: high-side switch in low frequency, EMC sensitive applications
- Buck converter for low power non-isolated point of loads

## Application diagram

- Reverse battery protection
- Power switch



## Available packages (W x L x H in mm)



## Discovery questions

- Is EMC a concern in your application? (advantage of P- over N-channel MOSFET)
- What voltage does the system operate at? (determine MOSFET voltage)
- What is the ambient temperature of your application? (is 175 °C  $T_j$  max a plus)