

## FEATURED PRODUCT

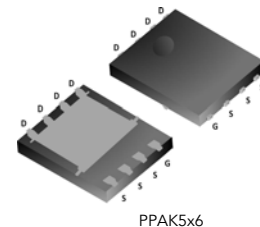
### Good-Ark Semiconductor GSFPR8504

#### 40V, 280A, 0.70mΩ, N-Channel SGT MOSFET in PPAK5x6 Package

Good-Ark Semiconductor introduces GSFPR8504, a 40V, 280A, N-Channel SGT MOSFET with industry's lowest  $R_{DS(ON)}$  of 0.70mΩ @  $I_D=50A$ ,  $V_{GS}=10V$ . This device utilizes the latest split gate technology (SGT) and advanced clip bonding techniques to achieve outstanding FOM performance minimizing switching and conduction losses. Packaged in the compact PPAK5x6 package, GSFPR8504 is ideal for DC/DC converters, synchronous rectification, on board power for servers, motor controls and high power density point of load which require high switching and optimal efficiency.

#### FEATURES

- Best-in-class on-resistance (typical 0.7mΩ)
- High current density
- Lower gate-charge
- Low switching and conduction loss
- Lower Qgd reducing Miller charge coupling



#### BENEFITS

- Small footprint and higher power density
- Better EMI behavior to optimize circuit design and enable system overall cost saving
- Outstanding FOM performance

#### APPLICATIONS

- DC-DC conversion
- Synchronous rectification
- BLDC
- BMS

Free samples available for immediate testing.  
Contact us at: 631 - 319- 1858 or  
[inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)

#### KEY SPECIFICATIONS

Part Number	$I_D$	$V_{DS}$	$V_{GS}$	$V_{GS(MT)}$ @ $V_{DS}=V_{GS}$ , $I_D=250\mu A$		$R_{DS(ON)}$ @ $I_D=50A$ $V_{GS}=10V$		$R_{DS(ON)}$ @ $I_D=50A$ $V_{GS}=4.5V$		$Q_{GD}$ @ $V_{DD}=15V$ , $I_D=45A$ $V_{GS}=10V$	$Q_G$ @ $V_{DD}=15V$ , $I_D=45A$ , $V_{GS}=10V$	$C_{ISS}$ (pF)	$T_J, T_{STG}$ (°C)
				Min (V)	Max (V)	Typ. (mΩ)	Max (mΩ)	Typ. (mΩ)	Max (mΩ)	Typ. (nC)	Typ. (nC)		
GSFPR8504	280	40	±20	1.1	2.9	0.70	0.85	1.0	1.4	7.5	121	9040	-55 to +150

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