

## FEATURED PRODUCT

### Good-Ark Semiconductor 80V-85V N-Channel SGT MOSFETs

#### In PPAK5x6/TO-220/TO-263/TOLL Packages

Good-Ark Semiconductor introduces 80V-85V, N-Channel SGT MOSFETs series with the industry's lowest  $R_{DS(ON)}$  and outstanding  $Q_{gd}$  in various package types. This series utilizes the latest shielded-gate trench (SGT) technology and advance clip bonding techniques to achieve industry's leading figure of merit (FOM) performance with minimum conduction loss.

Available in various power packages with outstanding power dissipation capability, this product series is designed to meet the demands of space constraint applications that require higher power density and optimal efficiency. Reducing the number of MOSFETs in parallel, increasing overall system reliability while achieving cost saving, this SGT MOSFETs series is ideal for synchronous rectifications in 5G telecom, server power supply, battery power drivers and adapters, and BLDC motors.

#### FEATURES

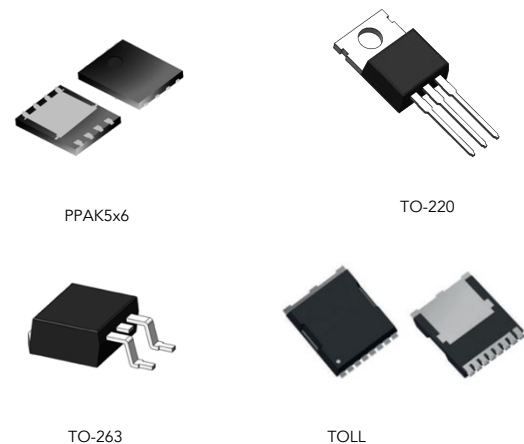
- Best-in-class on-resistance
- High current density and efficiency
- Lower gate-charge
- Industry leading figure of merit (FOM)

#### BENEFITS

- Small footprint and higher power density
- Reduces the number of MOSFETs in parallel
- Increases system reliability while achieving cost-saving

#### APPLICATIONS

- BMS
- High frequency switch
- Synchronous rectification
- BLDC motor
- Server



Free samples available for immediate testing.  
Contact us at: (+1) 631-319-1858 or [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)

#### KEY SPECIFICATIONS

| Part Number | Package | $I_D$   | $V_{DS}$ | $V_{GS}$ | $V_{GS(M)}$ |         | $R_{DS(ON)}$<br>@ $V_{GS}=10V$ |          | $Q_{gd}$  | $Q_G$     | $C_{iss}$ | $T_J, T_{STG}$ |
|-------------|---------|---------|----------|----------|-------------|---------|--------------------------------|----------|-----------|-----------|-----------|----------------|
|             |         | Max (A) | Max (V)  | Max (V)  | Min (V)     | Max (V) | Typ. (mΩ)                      | Max (mΩ) | Typ. (nC) | Typ. (nC) | (pF)      | (°C)           |
| GSGTL1R608  | TOLL    | 300     | 80       | ±20      | 2.1         | 3.9     | 1.1                            | 1.6      | 52        | 202       | 13000     | -55 to +150    |
| GSGTL2R408  | TOLL    | 240     | 80       | ±20      | 2.1         | 3.9     | 2.0                            | 2.4      | 17        | 95        | 6022      | -55 to +150    |
| GSGP2R608   | PPAK5x6 | 170     | 80       | ±20      | 2.1         | 3.9     | 2.2                            | 2.6      | 17        | 95        | 6022      | -55 to +150    |
| GSGP3R608   | PPAK5x6 | 100     | 80       | ±20      | 2.0         | 4.0     | 3.0                            | 3.6      | 13        | 67        | 4435      | -55 to +150    |
| GSGT5R585   | TO-263  | 120     | 85       | ±20      | 2.2         | 3.9     | 4.2                            | 5.5      | 16        | 69        | 4284      | -55 to +150    |
| GSGH5R585   | TO-220  | 120     | 85       | ±20      | 2.2         | 3.9     | 4.5                            | 5.5      | 16        | 69        | 4284      | -55 to +150    |

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