1. General description

425 Amp continuous current, standard level gate drive, N-channel enhancement mode MOSFET in LFPAK88 package. NextPowerS3 family using Nexperia’s unique “SchottkyPlus” technology delivers high efficiency and low spiking performance usually associated with MOSFETs with an integrated Schottky or Schottky-like diode but without problematic high leakage current. NextPowerS3 is particularly suited to high efficiency applications at high switching frequencies, and also safe and reliable switching at high load-current.

2. Features and benefits

- 425 Amp continuous current capability
- LFPAK88 (8 x 8 mm) LFPAK-style low-stress exposed lead-frame for ultimate reliability, optimum soldering and easy solder-joint inspection
- Copper-clip and solder die attach for low package inductance and resistance, and high \(I_D\) (max) rating
- Ideal replacement for D2PAK and 10 x 12 mm leadless package types
- Qualified to 175 °C
- Meets UL2595 requirements for creepage and clearance
- Avalanche rated, 100 % tested
- Low \(Q_G\), \(Q_GD\) and \(Q_OSS\) for high efficiency, especially at higher switching frequencies
- Superfast switching with soft body-diode recovery for low-spiking and ringing, recommended for low EMI designs
- Unique “SchottkyPlus” technology for Schottky-like switching performance and low \(I_{DSS}\) leakage
- Narrow \(V_{GS(th)}\) rating for easy paralleling and improved current sharing
- Very strong linear-mode / safe operating area characteristics for safe and reliable switching at high-current conditions

3. Applications

- Brushless DC motor control
- Synchronous rectifier in high-power AC-DC applications, e.g. server power supplies
- Battery protection
- eFuse and load switch
- Hotswap / in-rush current management

4. Quick reference data

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(V_{DS})</td>
<td>drain-source voltage</td>
<td>(25 , ^\circ C \leq T_j \leq 175 , ^\circ C)</td>
<td>-</td>
<td>-</td>
<td>40</td>
<td>V</td>
</tr>
<tr>
<td>(I_D)</td>
<td>drain current</td>
<td>(V_{GS} = 10 , V; T_{mb} = 25 , ^\circ C; \text{Fig. 2})</td>
<td>[1]</td>
<td>-</td>
<td>425</td>
<td>A</td>
</tr>
<tr>
<td>(P_{tot})</td>
<td>total power dissipation</td>
<td>(T_{mb} = 25 , ^\circ C; \text{Fig. 1})</td>
<td>-</td>
<td>-</td>
<td>375</td>
<td>W</td>
</tr>
</tbody>
</table>
N-channel 40 V, 0.7 mΩ, 425 Amps continuous, standard level MOSFET in LFPAK88 using NextPowerS3 Technology

### Static characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
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<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>$R_{th(j-mb)}$</td>
<td>thermal resistance from junction to mounting base</td>
<td>$V_{GS} = 10 \text{ V}; ; I_D = 25 \text{ A}; ; T_j = 25 , ^\circ \text{C}; ; \text{Fig. 11}$</td>
<td>-</td>
<td>0.35</td>
<td>0.4</td>
<td>K/W</td>
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### Dynamic characteristics

<table>
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<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Q_G(tot)$</td>
<td>total gate charge</td>
<td>$I_D = 25 \text{ A}; ; V_{DS} = 32 \text{ V}; ; V_{GS} = 10 \text{ V}; ; \text{Fig. 13, Fig. 14}$</td>
<td>-</td>
<td>144</td>
<td>202</td>
<td>nC</td>
</tr>
<tr>
<td>$Q_{GD}$</td>
<td>gate-drain charge</td>
<td>$I_D = 25 \text{ A}; ; V_{DS} = 32 \text{ V}; ; V_{GS} = 10 \text{ V}; ; \text{Fig. 13, Fig. 14}$</td>
<td>-</td>
<td>25</td>
<td>50</td>
<td>nC</td>
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</table>

### Source-drain diode

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Q_r$</td>
<td>recovered charge</td>
<td>$I_S = 25 \text{ A}; ; \frac{dI_S}{dt} = -100 \text{ A/}\mu\text{s}; ; V_{GS} = 0 \text{ V}; ; V_{DS} = 20 \text{ V}; ; \text{Fig. 17}$</td>
<td>[2]</td>
<td>-</td>
<td>74</td>
<td>-</td>
</tr>
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</table>

[1] 425A. Continuous current has been successfully demonstrated during application. Practically, the current will be limited by the PCB, thermal design and operating temperature.

[2] Includes capacitive recovery

### Pinning information

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<tr>
<th>Pin</th>
<th>Symbol</th>
<th>Description</th>
<th>Simplified outline</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>G</td>
<td>gate</td>
<td><img src="image" alt="Simplified outline" /></td>
</tr>
<tr>
<td>2</td>
<td>S</td>
<td>source</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>S</td>
<td>source</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>S</td>
<td>source</td>
<td></td>
</tr>
<tr>
<td>mb</td>
<td>D</td>
<td>mounting base; connected to drain</td>
<td></td>
</tr>
</tbody>
</table>

### Ordering information

<table>
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<tr>
<th>Type number</th>
<th>Package Name</th>
<th>Description</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSMNR70-40SSH</td>
<td>LFPAK88</td>
<td>plastic, single-ended surface-mounted package (LFPAK88); 4 leads; 2 mm pitch; 8 mm x 8 mm x 1.6 mm body</td>
<td>SOT1235</td>
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### Limiting values

In accordance with the Absolute Maximum Rating System (IEC 60134).

<table>
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<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_{DS}$</td>
<td>drain-source voltage</td>
<td>$25 , ^\circ \text{C} \leq T_j \leq 175 , ^\circ \text{C}$</td>
<td>-</td>
<td>40</td>
<td>V</td>
</tr>
<tr>
<td>$V_{DSM}$</td>
<td>peak drain-source voltage</td>
<td>$t_p \leq 20 , \text{ns}; ; f \leq 500 , \text{kHz}; ; E_{DS} \leq 200 , \text{nJ}; ; \text{pulsed}$</td>
<td>-</td>
<td>45</td>
<td>V</td>
</tr>
<tr>
<td>$V_{DGR}$</td>
<td>drain-gate voltage</td>
<td>$25 , ^\circ \text{C} \leq T_j \leq 175 , ^\circ \text{C}; ; R_G = 20 , \text{k}\Omega$</td>
<td>-</td>
<td>40</td>
<td>V</td>
</tr>
<tr>
<td>$V_{GS}$</td>
<td>gate-source voltage</td>
<td>-20</td>
<td>20</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>$P_{tot}$</td>
<td>total power dissipation</td>
<td>$T_{mb} = 25 , ^\circ \text{C}; ; \text{Fig. 1}$</td>
<td>-</td>
<td>375</td>
<td>W</td>
</tr>
</tbody>
</table>
Nexperia

PSMNR70-40SSH

N-channel 40 V, 0.7 mΩ, 425 Amps continuous, standard level MOSFET in LFPAK88 using NextPowerS3 Technology

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I_D</td>
<td>drain current</td>
<td>$V_{GS} = 10 \text{ V}; \ T_{mb} = 25 , ^{\circ}\text{C}; \text{Fig. 2}$</td>
<td>[1] -</td>
<td>425</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$V_{GS} = 10 \text{ V}; \ T_{mb} = 100 , ^{\circ}\text{C}; \text{Fig. 2}$</td>
<td></td>
<td>350</td>
<td>A</td>
</tr>
<tr>
<td>I_DM</td>
<td>peak drain current</td>
<td>pulsed; $t_{p} \leq 10 \mu\text{s}; \ T_{mb} = 25 , ^{\circ}\text{C}; \text{Fig. 3}$</td>
<td></td>
<td>- 1983</td>
<td>A</td>
</tr>
<tr>
<td>$T_{stg}$</td>
<td>storage temperature</td>
<td></td>
<td>-55</td>
<td>175</td>
<td>°C</td>
</tr>
<tr>
<td>$T_{j}$</td>
<td>junction temperature</td>
<td></td>
<td>-55</td>
<td>175</td>
<td>°C</td>
</tr>
<tr>
<td>$T_{sld(M)}$</td>
<td>peak soldering temperature</td>
<td></td>
<td></td>
<td>-260</td>
<td>°C</td>
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</table>

**Source-drain diode**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
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<tr>
<td>$I_S$</td>
<td>source current</td>
<td>$T_{mb} = 25 , ^{\circ}\text{C}$</td>
<td>-</td>
<td>500</td>
<td>A</td>
</tr>
<tr>
<td>$I_{SM}$</td>
<td>peak source current</td>
<td>pulsed; $t_{p} \leq 10 \mu\text{s}; \ T_{mb} = 25 , ^{\circ}\text{C}$</td>
<td>-</td>
<td>1983</td>
<td>A</td>
</tr>
</tbody>
</table>

**Avalanche ruggedness**

<table>
<thead>
<tr>
<th>Symbol</th>
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<th>Conditions</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$E_{DS(AL)}}$</td>
<td>non-repetitive drain-source avalanche energy</td>
<td>$I_D = 120 \text{ A}; V_{sup} \leq 40 \text{ V}; R_{GS} = 50 \Omega; V_{GS} = 10 \text{ V}; T_{j(init)} = 25 , ^{\circ}\text{C};$ unclamped; Fig. 4</td>
<td>-</td>
<td>940</td>
<td>mJ</td>
</tr>
<tr>
<td>$I_{AS}$</td>
<td>non-repetitive avalanche current</td>
<td>$V_{sup} = 40 \text{ V}; V_{GS} = 10 \text{ V}; T_{j(init)} = 25 , ^{\circ}\text{C}; \ R_{GS} = 50 \Omega$</td>
<td>[3]</td>
<td>- 294</td>
<td>A</td>
</tr>
</tbody>
</table>

[1] 425A. Continuous current has been successfully demonstrated during application. Practically, the current will be limited by PCB, thermal design and operating temperature.

[2] 500A. Continuous current has been successfully demonstrated during application. Practically, the current will be limited by PCB, thermal design and operating temperature.

[3] Protected by 100% test

---

![Normalized total power dissipation as a function of mounting base temperature](image1)

$P_{der} = \frac{P_{tot}}{P_{tot(25^\circ C)}} \times 100\%$

Fig. 1. Normalized total power dissipation as a function of mounting base temperature

![Continuous drain current as a function of mounting base temperature](image2)

$V_{GS} \geq 10 \text{ V}$

(1) 425A continuous current has been successfully demonstrated during application tests. Practically the current will be limited by PCB, thermal design and operating temperature.

Fig. 2. Continuous drain current as a function of mounting base temperature
**Nexperia**

**PSMNR70-40SSH**

N-channel 40 V, 0.7 mΩ, 425 Amps continuous, standard level MOSFET in LFPAK88 using NextPowerS3 Technology

\[ T_{mb} = 25 \, ^\circ C; \text{ } I_{DM} \text{ is a single pulse} \]

**Fig. 3.** Safe operating area; continuous and peak drain currents as a function of drain-source voltage

\[ (1) \quad T_{j(\text{init})} = 25 \, ^\circ C; \quad (2) \quad T_{j(\text{init})} = 150 \, ^\circ C; \quad (3) \text{ Repetitive Avalanche} \]

**Fig. 4.** Avalanche rating; avalanche current as a function of avalanche time

### 8. Thermal characteristics

**Table 5. Thermal characteristics**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>( R_{th(j-mb)} )</td>
<td>thermal resistance from junction to mounting base</td>
<td>Fig. 5</td>
<td>-</td>
<td>0.35</td>
<td>0.4</td>
<td>K/W</td>
</tr>
<tr>
<td>( R_{th(j-a)} )</td>
<td>thermal resistance from junction to ambient</td>
<td>Fig. 6</td>
<td>-</td>
<td>35</td>
<td>-</td>
<td>K/W</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fig. 7</td>
<td>-</td>
<td>70</td>
<td>-</td>
<td>K/W</td>
</tr>
</tbody>
</table>

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PSMNR70-40SSH

N-channel 40 V, 0.7 mΩ, 425 Amps continuous, standard level MOSFET in LFPAK88 using NexPowerS3 Technology

Fig. 5. Transient thermal impedance from junction to mounting base as a function of pulse duration

Fig. 6. PCB layout for resistance from junction to ambient

Fig. 7. PCB layout with minimum footprint for thermal resistance from junction to ambient

9. Characteristics

Table 6. Characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(V_{(BR)}DSS)</td>
<td>drain-source breakdown voltage</td>
<td>(I_D = 250 \mu A; V_{GS} = 0 V; T_j = 25 ^\circ C)</td>
<td>40</td>
<td>43</td>
<td>-</td>
<td>V</td>
</tr>
<tr>
<td>(V_{(BR)}DSS)</td>
<td></td>
<td>(I_D = 250 \mu A; V_{GS} = 0 V; T_j = -55 ^\circ C)</td>
<td>36</td>
<td>40</td>
<td>-</td>
<td>V</td>
</tr>
<tr>
<td>(V_{GS(th)})</td>
<td>gate-source threshold voltage</td>
<td>(I_D = 1 mA; V_{DS} = V_{GS}; T_j = 25 ^\circ C)</td>
<td>2.4</td>
<td>3</td>
<td>3.6</td>
<td>V</td>
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<tr>
<td>(\Delta V_{GS(th)}/\Delta T)</td>
<td>gate-source threshold voltage variation with temperature</td>
<td>(25 ^\circ C \leq T_j \leq 175 ^\circ C)</td>
<td>-</td>
<td>-8.2</td>
<td>-</td>
<td>mV/K</td>
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<tr>
<td>(I_{DSS})</td>
<td>drain leakage current</td>
<td>(V_{DS} = 32 V; V_{GS} = 0 V; T_j = 25 ^\circ C)</td>
<td>-</td>
<td>-</td>
<td>1.6</td>
<td>µA</td>
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<tr>
<td>(I_{DSS})</td>
<td></td>
<td>(V_{DS} = 32 V; V_{GS} = 0 V; T_j = 175 ^\circ C)</td>
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<td>264</td>
<td>-</td>
<td>µA</td>
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<tr>
<td>(I_{GSS})</td>
<td>gate leakage current</td>
<td>(V_{GS} = 20 V; V_{DS} = 0 V; T_j = 25 ^\circ C)</td>
<td>-</td>
<td>2</td>
<td>100</td>
<td>nA</td>
</tr>
<tr>
<td>(I_{GSS})</td>
<td></td>
<td>(V_{GS} = -20 V; V_{DS} = 0 V; T_j = 25 ^\circ C)</td>
<td>-</td>
<td>2</td>
<td>100</td>
<td>nA</td>
</tr>
<tr>
<td>(R_{DSS})</td>
<td>drain-source on-state resistance</td>
<td>(V_{GS} = 10 V; I_D = 25 A; T_j = 25 ^\circ C)</td>
<td>0.43</td>
<td>0.62</td>
<td>0.7</td>
<td>mΩ</td>
</tr>
</tbody>
</table>

PSMNR70-40SSH

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<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_G</td>
<td>gate resistance</td>
<td>( f = 1 \text{ MHz}; T_j = 25 ^\circ \text{C} )</td>
<td>0.5</td>
<td>1.2</td>
<td>3</td>
<td>Ω</td>
</tr>
</tbody>
</table>

### Dynamic characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q_G(tot)</td>
<td>total gate charge</td>
<td>( I_D = 25 \text{ A}; V_{DS} = 32 \text{ V}; V_{GS} = 10 \text{ V}; ) ( I_D = 0 \text{ A}; V_{DS} = 0 \text{ V}; V_{GS} = 10 \text{ V} )</td>
<td>-</td>
<td>144</td>
<td>202</td>
<td>nC</td>
</tr>
<tr>
<td>Q_GS</td>
<td>gate-source charge</td>
<td>( I_D = 25 \text{ A}; V_{DS} = 32 \text{ V}; V_{GS} = 10 \text{ V}; ) ( I_D = 0 \text{ A}; V_{DS} = 0 \text{ V}; V_{GS} = 10 \text{ V} )</td>
<td>-</td>
<td>72</td>
<td>-</td>
<td>nC</td>
</tr>
<tr>
<td>Q_GS(th)</td>
<td>pre-threshold gate-source charge</td>
<td>( I_D = 25 \text{ A}; V_{DS} = 32 \text{ V}; V_{GS} = 10 \text{ V}; ) ( I_D = 0 \text{ A}; V_{DS} = 0 \text{ V}; V_{GS} = 10 \text{ V} )</td>
<td>-</td>
<td>40</td>
<td>60</td>
<td>nC</td>
</tr>
<tr>
<td>Q_GS(th-pl)</td>
<td>post-threshold gate-source charge</td>
<td>[\text{Fig. } 13; \text{Fig. } 14]</td>
<td>-</td>
<td>11</td>
<td>43</td>
<td>nC</td>
</tr>
<tr>
<td>Q_GD</td>
<td>gate-drain charge</td>
<td></td>
<td>-</td>
<td>25</td>
<td>50</td>
<td>nC</td>
</tr>
<tr>
<td>V_GS(pl)</td>
<td>gate-source plateau voltage</td>
<td>( I_D = 25 \text{ A}; V_{DS} = 32 \text{ V}; ) ( \text{Fig. } 13; \text{Fig. } 14 )</td>
<td>-</td>
<td>4.1</td>
<td>-</td>
<td>V</td>
</tr>
<tr>
<td>C_iss</td>
<td>input capacitance</td>
<td>( V_{DS} = 25 \text{ V}; V_{GS} = 0 \text{ V}; ) ( f = 1 \text{ MHz}; ) ( T_j = 25 ^\circ \text{C}; ) ( \text{Fig. } 15 )</td>
<td>-</td>
<td>11228</td>
<td>15719</td>
<td>pF</td>
</tr>
<tr>
<td>C_oss</td>
<td>output capacitance</td>
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<td>-</td>
<td>2363</td>
<td>3308</td>
<td>pF</td>
</tr>
<tr>
<td>C_rss</td>
<td>reverse transfer capacitance</td>
<td></td>
<td>-</td>
<td>415</td>
<td>913</td>
<td>pF</td>
</tr>
<tr>
<td>t_d(on)</td>
<td>turn-on delay time</td>
<td>( V_{DS} = 30 \text{ V}; R_L = 1.2 \text{ Ω}; V_{GS} = 10 \text{ V}; ) ( R_G(\text{ext}) = 5 \text{ Ω} )</td>
<td>-</td>
<td>35</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>t_r</td>
<td>rise time</td>
<td></td>
<td>-</td>
<td>30</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>t_d(off)</td>
<td>turn-off delay time</td>
<td></td>
<td>-</td>
<td>94</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>t_f</td>
<td>fall time</td>
<td></td>
<td>-</td>
<td>41</td>
<td>-</td>
<td>ns</td>
</tr>
<tr>
<td>Q_oss</td>
<td>output charge</td>
<td>( V_{GS} = 0 \text{ V}; V_{DS} = 25 \text{ V}; ) ( f = 1 \text{ MHz}; ) ( T_j = 25 ^\circ \text{C} )</td>
<td>-</td>
<td>102</td>
<td>-</td>
<td>nC</td>
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</tbody>
</table>

### Source-drain diode

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>V_SD</td>
<td>source-drain voltage</td>
<td>( I_S = 25 \text{ A}; V_{GS} = 0 \text{ V}; T_j = 25 ^\circ \text{C}; ) ( \text{Fig. } 16 )</td>
<td>-</td>
<td>0.75</td>
<td>1</td>
<td>V</td>
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<tr>
<td>t_tr</td>
<td>reverse recovery time</td>
<td>( I_S = 25 \text{ A}; ) ( \text{dI}<em>S/\text{dt} = -100 \text{ A/µs}; V</em>{GS} = 0 \text{ V}; V_{DS} = 20 \text{ V}; ) ( \text{Fig. } 17 )</td>
<td>-</td>
<td>53</td>
<td>-</td>
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<tr>
<td>Q_r</td>
<td>recovered charge</td>
<td>[\text{Fig. } 17]</td>
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<td>t_a</td>
<td>reverse recovery rise time</td>
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<td>t_b</td>
<td>reverse recovery fall time</td>
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<td>23</td>
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[1] includes capacitive recovery
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PSMNR70-40SSH

N-channel 40 V, 0.7 mΩ, 425 Amps continuous, standard level MOSFET in LFPAK88 using NextPowerS3 Technology

Fig. 8. Output characteristics; drain current as a function of drain-source voltage; typical values

Fig. 9. Drain-source on-state resistance as a function of gate-source voltage; typical values

Fig. 10. Transfer characteristics; drain current as a function of gate-source voltage; typical values

Fig. 11. Drain-source on-state resistance as a function of drain current; typical values

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Fig. 12. Normalized drain-source on-state resistance factor as a function of junction temperature

\[ a = \frac{R_{DSon}}{R_{DSon\ (25\ ^\circ C)}} \]

Fig. 13. Gate-source voltage as a function of gate charge; typical values

\[ T_j = 25 \ ^\circ C; \ I_D = 25 \ A \]

Fig. 14. Gate charge waveform definitions

Fig. 15. Input, output and reverse transfer capacitances as a function of drain-source voltage; typical values

\[ V_{GS} = 0 \ V; \ f = 1 \ MHz \]
N-channel 40 V, 0.7 mΩ, 425 Amps continuous, standard level MOSFET in LFPAK88 using NextPowerS3 Technology

Fig. 16. Source-drain (diode forward) current as a function of source-drain (diode forward) voltage; typical values

Fig. 17. Reverse recovery timing definition

$V_{GS} = 0$ V

$V_{SD} = 0$ V

$T_j = 25^\circ C$

$T_j = 175^\circ C$

$V_{GS} = 0$ V

$V_{SD} = 1.2$ V

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10. Package outline

Plastic single-ended surface-mounted package (LFPAK88); 4 leads

Fig. 18. Package outline LFPAK88 (SOT1235)
11. Soldering

Footprint information for reflow soldering of LFPAK88 package

SOT1235

Fig. 19. Reflow soldering footprint for LFPAK88 (SOT1235)
12. Legal information

Data sheet status

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