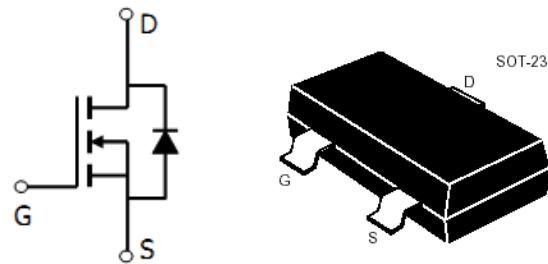


## N-Channel Power MOSFET



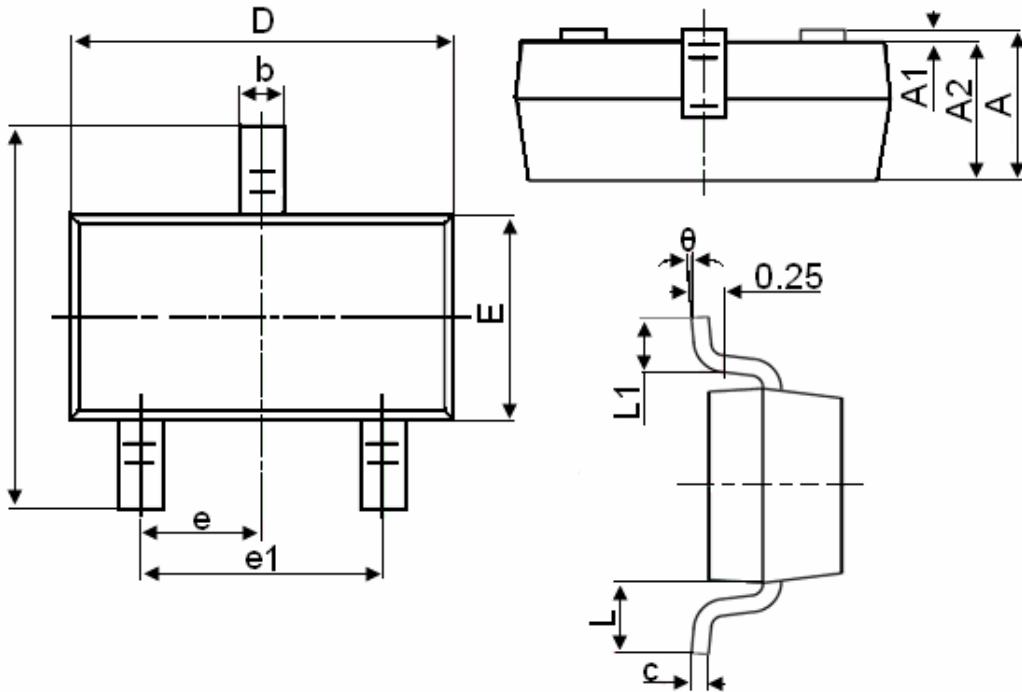
### MAXIMUM RATINGS

| Characteristic                                     | Symbol     | Max         | Unit             |
|--|------------|-------------|------------------|
| Drain-Source Voltage                               | $BV_{DSS}$ | 30          | V                |
| Gate- Source Voltage                               | $V_{GS}$   | $\pm 20$    | V                |
| Drain Current (continuous)                         | $I_D$      | 5           | A                |
| Drain Current (pulsed)                             | $I_{DM}$   | 18          | A                |
| Total Device Dissipation<br>$T_A=25^\circ\text{C}$ | $P_D$      | 1400        | mW               |
| Junction   | $T_J$      | 150         | $^\circ\text{C}$ |
| Storage Temperature                                | $T_{stg}$  | -55 to +150 | $^\circ\text{C}$ |

**ELECTRICAL CHARACTERISTICS**(T<sub>A</sub>=25°C unless otherwise noted)

| Characteristic   | Symbol              | Min | Typ | Max  | Unit |
|--|---------------------|-----|-----|------|------|
| Drain-Source Breakdown Voltage<br>(I <sub>D</sub> =250uA, V <sub>GS</sub> =0V)         | BVDSS               | 30  | —   | —    | V    |
| Gate Threshold Voltage<br>(I <sub>D</sub> =250uA, V <sub>GS</sub> =V <sub>DS</sub> )   | V <sub>GS(th)</sub> | 1   | —   | 3    | V    |
| Diode Forward Voltage Drop<br>(I <sub>S</sub> =1A, V <sub>GS</sub> =0V)                | V <sub>SD</sub>     | —   | 0.7 | 1    | V    |
| Zero Gate Voltage Drain Current<br>(V <sub>GS</sub> =0V, V <sub>DS</sub> =30V)         | I <sub>DSS</sub>    | —   | —   | 1    | uA   |
| Gate Body Leakage<br>(V <sub>GS</sub> =±20V, V <sub>DS</sub> =0V)                      | I <sub>GSS</sub>    | —   | —   | ±100 | nA   |
| Static Drain-Source On-State Resistance<br>(I <sub>D</sub> =5A, V <sub>GS</sub> =10V)  | R <sub>DS(ON)</sub> | —   | 25  | 28   | mΩ   |
| Static Drain-Source On-State Resistance<br>(I <sub>D</sub> =3A, V <sub>GS</sub> =4.5V) | R <sub>DS(ON)</sub> | —   | 40  | 45   | mΩ   |
| Input Capacitance<br>(V <sub>GS</sub> =0V, V <sub>DS</sub> =15V, f=1MHz)               | C <sub>ISS</sub>    | —   | 545 | —    | pF   |
| Output Capacitance<br>(V <sub>GS</sub> =0V, V <sub>DS</sub> =15V, f=1MHz)              | C <sub>OSS</sub>    | —   | 66  | —    | pF   |
| Turn-ON Time<br>(V <sub>DS</sub> =15V, V <sub>GS</sub> =10V, R <sub>GEN</sub> =6Ω)     | t <sub>(on)</sub>   | —   | 9.6 | —    | ns   |
| Turn-OFF Time<br>(V <sub>DS</sub> =15V, V <sub>GS</sub> =10V, R <sub>GEN</sub> =6Ω)    | t <sub>(off)</sub>  | —   | 39  | —    | ns   |

Pulse Width≤300 μs; Duty Cycle≤2.0%

**SOT-23 Package Information**

| Symbol | Dimensions in Millimeters |       |
|--------|---------------------------|-------|
|        | MIN.                      | MAX.  |
| A      | 0.900                     | 1.150 |
| A1     | 0.000                     | 0.100 |
| A2     | 0.900                     | 1.050 |
| b      | 0.300                     | 0.500 |
| c      | 0.080                     | 0.150 |
| D      | 2.800                     | 3.000 |
| E      | 1.200                     | 1.400 |
| E1     | 2.250                     | 2.550 |
| e      | 0.950TYP                  |       |
| e1     | 1.800                     | 2.000 |
| L      | 0.550REF                  |       |
| L1     | 0.300                     | 0.500 |
| θ      | 0°                        | 8°    |

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for MOSFET category:***

***Click to view products by SLKORMICRO manufacturer:***

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [FW216A-TL-2W](#) [FW231A-TL-E](#) [APT5010JVR](#) [NTNS3A92PZT5G](#)  
[IRF100S201](#) [JANTX2N5237](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [FCA20N60\\_F109](#) [FDZ595PZ](#) [STD6600NT4G](#) [FSS804-TL-E](#) [2SJ277-DL-E](#)  
[2SK1691-DL-E](#) [2SK2545\(Q,T\)](#) [D2294UK](#) [405094E](#) [423220D](#) [MCH6646-TL-E](#) [TPCC8103,L1Q\(CM](#) [367-8430-0972-503](#) [VN1206L](#)  
[424134F](#) [026935X](#) [051075F](#) [SBVS138LT1G](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [751625C](#) [873612G](#) [IRF7380TRHR](#)  
[IPS70R2K0CEAKMA1](#) [RJK60S3DPP-E0#T2](#) [RJK60S5DPK-M0#T0](#) [APT5010JVFR](#) [APT12031JFLL](#) [APT12040JVR](#) [DMN3404LQ-7](#)  
[NTE6400](#) [JANTX2N6796U](#) [JANTX2N6784U](#) [JANTXV2N5416U4](#) [SQM110N05-06L-GE3](#) [SIHF35N60E-GE3](#)