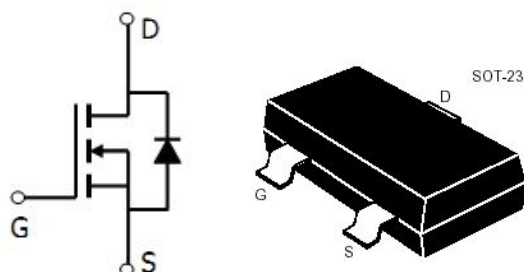


## N-Channel Power MOSFET



### MAXIMUM RATINGS

Characteristic	Symbol	Max	Unit
Drain-Source Voltage	$BV_{DSS}$	60	V
Gate- Source Voltage	$V_{GS}$	$\pm 20$	V
Drain Current-continuous	$I_{DR}$	3	A
Drain Current-pulsed	$I_{DRM}$	10	A

### THERMAL CHARACTERISTICS

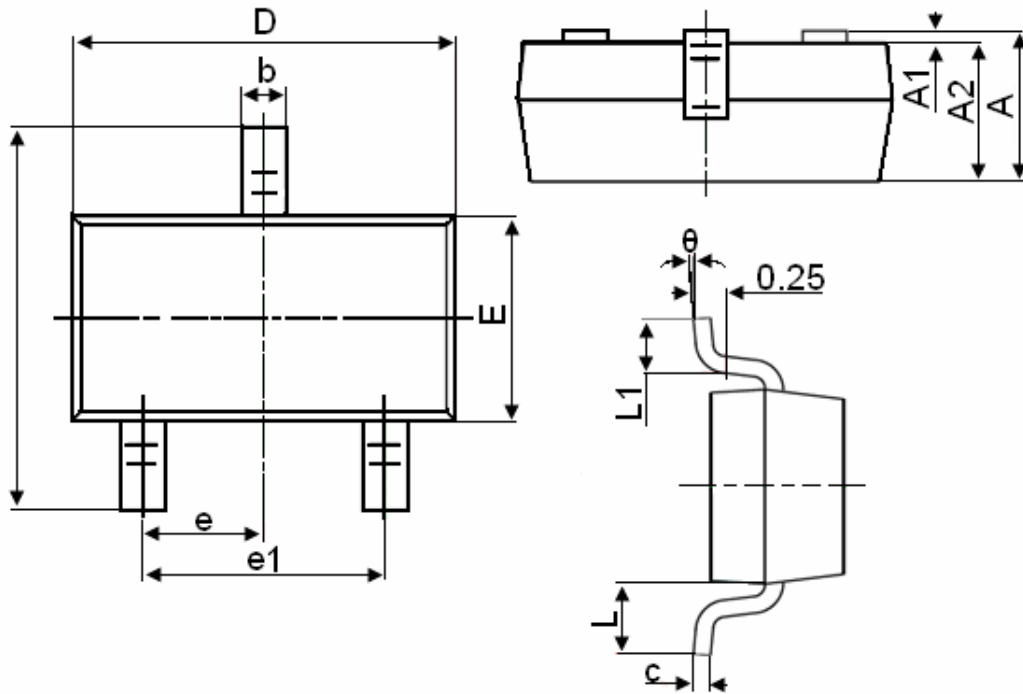
Characteristic	Symbol	Max	Unit
Total Device Dissipation $T_A=25^\circ\text{C}$ Derate above $25^\circ\text{C}$	PD	1380 3.8	mW mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	90	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	$T_J, T_{stg}$	150 $^\circ\text{C}$ , -55to+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 (I <sub>D</sub> =250uA, V <sub>GS</sub> =0V)	BV <sub>DSS</sub>	60	—	—	V
Gate Threshold Voltage (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 (I <sub>SD</sub> =1A, V <sub>GS</sub> =0V)	V <sub>SD</sub>	—	—	1.5	V
Zero Gate Voltage Drain Current (V <sub>GS</sub> =0V, V <sub>DS</sub> = 60V)	I <sub>DSS</sub>	—	—	1	uA
Gate Body Leakage (V <sub>GS</sub> =±20V, V <sub>DS</sub> =0V)	I <sub>GSS</sub>	—	—	±100	nA
Static Drain-Source On-State Resistance (I <sub>D</sub> =3A, V <sub>GS</sub> =10V) (I <sub>D</sub> =2A, V <sub>GS</sub> =4.5V)	R <sub>DS(ON)</sub>	—	—	90 120	mΩ
Input Capacitance (V <sub>GS</sub> =0V, V <sub>DS</sub> =25V, f=1MHz)	C <sub>ISS</sub>	—	—	550	pF
Common Source Output Capacitance (V <sub>GS</sub> =0V, V <sub>DS</sub> =25V, f=1MHz)	C <sub>OSS</sub>	—	—	125	pF
Turn-ON Time (V <sub>DS</sub> =30V, I <sub>D</sub> =200mA, R <sub>GEN</sub> =25Ω)	t <sub>(on)</sub>	—	—	40	ns
Turn-OFF Time (V <sub>DS</sub> =30V, I <sub>D</sub> =200mA, R <sub>GEN</sub> =25Ω)	t <sub>(off)</sub>	—	—	80	ns

1. FR-5=1.0×0.75×0.062in.
2. Alumina=0.4×0.3×0.024in.99.5%alumina.
3. Pulse Width≤300 μ s; 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
$\theta$	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](#)