

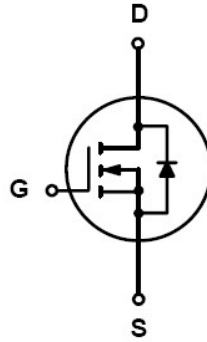
## N-Channel Enhancement Power Mosfet Specification

### Features

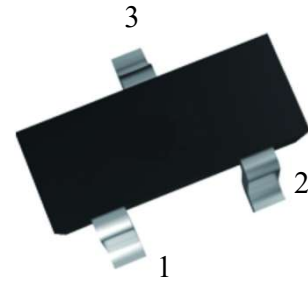
- Advanced trench cell design
- High speed switch

### Applications

- Portable appliances
- Notebook/PC appliances
- Power Management
- DC/DC Converter



SOT-23



1: Gate 2: Source 3: Drain

### Quick reference

$$BV \cong 60 \text{ V} \quad I_D = 2.3 \text{ A}$$

$$R_{DS(ON)} \cong 100 \text{ m}\Omega @ V_{GS} = 10 \text{ V}$$

$$R_{DS(ON)} \cong 120 \text{ m}\Omega @ V_{GS} = 5 \text{ V}$$

### ● Limiting Values

Symbol	Parameter	Rating	Unit
$V_{DSS}$	Drain-Source Voltage	60	V
$V_{GSS}$	Gate-Source Voltage	$\pm 20$	

● **Electrical Characteristics** ( Ta = 25°C Unless Otherwise Noted )

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
<b>Static Characteristics</b>						
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0 V, I <sub>DS</sub> = 250 μA	60	-	-	V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>DS</sub> = 250 μA	1.0	1.6	2.5	V
I <sub>DSS</sub>	Drain Leakage Current	V <sub>DS</sub> = 48 V, V <sub>GS</sub> = 0V	-	-	1	μA
		T <sub>J</sub> = 85 °C	-	-	30	μA
I <sub>GSS</sub>	Gate Leakage Current	V <sub>GS</sub> = ±20 V, V <sub>DS</sub> = 0 V	-	-	± 100	nA
R <sub>DS(ON)</sub> <sup>a</sup>	On-State Resistance	V <sub>GS</sub> = 10 V, I <sub>DS</sub> = 0.5A	-	-	100	mΩ
		V <sub>GS</sub> = 5 V, I <sub>DS</sub> = 0.5 A	-	-	120	
<b>Diode Characteristics<sup>b</sup></b>						
V <sub>SD</sub>	Diode Forward Voltage	I <sub>SD</sub> = 0.5 A, V <sub>GS</sub> = 0V	-	0.7	1.3	V

**Notes :**

This wafer must be stored at N2 box ( RH<20 % ).

Wafer must be completely assembled within two months.

a : CP measured on wafer by probe card. ( R<sub>DS(ON)</sub> depended on packaged type and amount of bonding wires )

b : Pulse test ; pulse width ≤ 300 μs, duty cycle ≤ 2%