

N-Channel Enhancement Power Mosfet Specification

Features

- Advanced trench cell design
- High speed switch

Applications

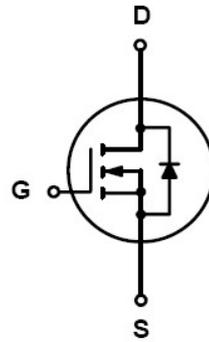
- Portable appliances
- Notebook/PC appliances
- Power Management
- DC/DC Converter

Quick reference

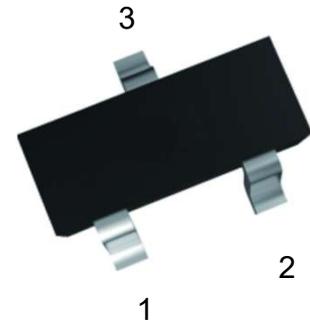
$BV \cong 60\text{ V}$ $ID=2.2\text{ A}$

$RDS(ON) \cong 105\text{ m}\Omega$ @ $VGS = 10\text{ V}$

$RDS(ON) \cong 130\text{ m}\Omega$ @ $VGS = 5\text{ V}$



SOT-23



1: Gate 2: Source 3: Drain

● Limiting Values

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

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

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Static Characteristics						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0 V, I _{DS} = 250 μA	60	-	-	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} , I _{DS} = 250 μA	1.0	1.6	2.5	V
I _{DSS}	Drain Leakage Current	V _{DS} = 48 V, V _{GS} = 0V	-	-	1	μA
		T _J = 85 °C	-	-	30	μA
I _{GSS}	Gate Leakage Current	V _{GS} = ±20 V, V _{DS} = 0 V	-	-	± 100	nA
R _{DS(ON)} ^a	On-State Resistance	V _{GS} = 10 V, I _{DS} = 0.5A	-	-	105	mΩ
		V _{GS} = 5 V, I _{DS} = 0.5 A	-	-	130	
Diode Characteristics^b						
V _{SD}	Diode Forward Voltage	I _{SD} = 0.5 A, V _{GS} = 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_{DS(ON)} depended on packaged type and amount of bonding wires)

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