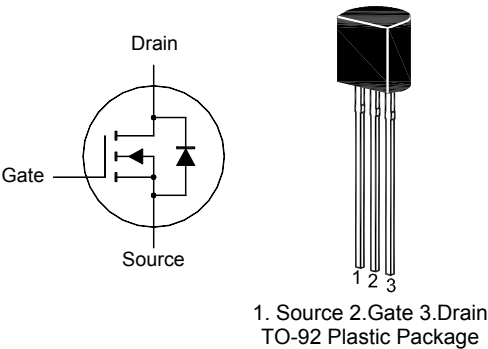


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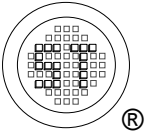
Small Signal MOSFET

200 mA, 60 V
N-Channel



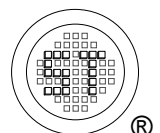
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Drain Source Voltage	V _{DSS}	60	V
Drain-Gate Voltage (R _{GS} = 1 MΩ)	V _{DGR}	60	V
Gate-source Voltage	Continuous	V _{GS}	± 20
	Non-repetitive (t _p ≤ 50 μs)	V _{GSM}	± 40
Drain Current	Continuous	I _D	200
	Pulsed	I _{DM}	500
Total Power Dissipation	P _D	350	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C



Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Drain-Source Breakdown Voltage at $I_D = 10\text{ }\mu\text{A}$	$V_{(BR)DSS}$	60	-	V
Zero Gate Voltage Drain Current at $V_{DS} = 48\text{ V}$	I_{DSS}	-	1	μA
Gate-Body Leakage Current at $V_{GS} = \pm 15\text{ V}$	I_{GSS}	-	± 100	nA
Gate Threshold Voltage at $V_{DS} = V_{GS}$, $I_D = 1\text{ mA}$	$V_{GS(th)}$	0.8	3	V
Static Drain-Source On-Resistance at $V_{GS} = 10\text{ V}$, $I_D = 500\text{ mA}$ at $V_{GS} = 4.5\text{ V}$, $I_D = 75\text{ mA}$	$R_{DS(on)}$	- -	5 6	Ω
Drain-Source On-Voltage at $V_{GS} = 10\text{ V}$, $I_D = 500\text{ mA}$ at $V_{GS} = 4.5\text{ V}$, $I_D = 75\text{ mA}$	$V_{DS(on)}$	- -	2.5 0.45	V
Forward Transconductance at $V_{DS} = 10\text{ V}$, $I_D = 200\text{ mA}$	g_{fs}	100	-	mS
Input Capacitance at $V_{DS} = 25\text{ V}$, $V_{GS} = 0$, $f = 1\text{ MHz}$	C_{iss}	-	60	pF
Output Capacitance at $V_{DS} = 25\text{ V}$, $V_{GS} = 0$, $f = 1\text{ MHz}$	C_{oss}	-	25	pF
Reverse Transfer Capacitance at $V_{DS} = 25\text{ V}$, $V_{GS} = 0$, $f = 1\text{ MHz}$	C_{rss}	-	5	pF
Turn-On Delay Time at $V_{DD} = 15\text{ V}$, $I_D = 500\text{ mA}$, $R_G = 25\text{ }\Omega$, $R_L = 30\text{ }\Omega$, $V_{gen} = 10\text{ V}$	t_{on}	-	10	ns
Turn-Off Delay Time at $V_{DD} = 15\text{ V}$, $I_D = 500\text{ mA}$, $R_G = 25\text{ }\Omega$, $R_L = 30\text{ }\Omega$, $V_{gen} = 10\text{ V}$	t_{off}	-	10	ns



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