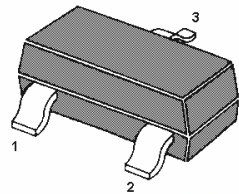


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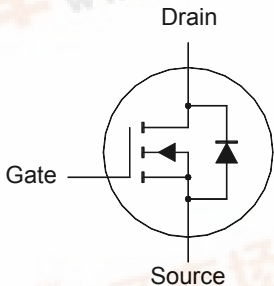
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N-Channel Logic Level Enhancement

Mode Field Effect Transistor



1. Gate 2. Source 3. Drain
SOT-23 Plastic Package



Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current	I_D	170	mA
Peak Drain Current	I_{DM}	680	mA
Total Power Dissipation	P_{tot}	360	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^{\circ}\text{C}$

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance from Junction to Ambient	R_{thj-a}	500 ¹⁾	K/W

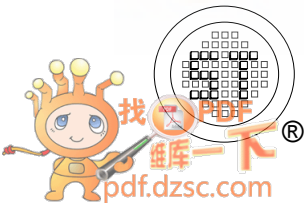
¹⁾ Device mounted on a printed-circuit board.

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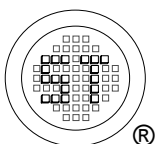


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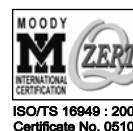
Characteristics at $T_a = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage at $I_D = 250\ \mu\text{A}$	$V_{(BR)DSS}$	100	-	-	V
Gate-Source Threshold Voltage at $V_{GS} = V_{DS}$, $I_D = 1\ \text{mA}$	V_{GSth}	0.8	-	2	V
Drain-Source Leakage Current at $V_{DS} = 100\ \text{V}$ at $V_{DS} = 20\ \text{V}$	I_{DSS}	- -	- -	1 10	μA nA
Gate-Source Leakage Current at $V_{GS} = \pm 20\ \text{V}$	I_{GSS}	-	-	± 50	nA
Drain-Source On-State Resistance at $V_{GS} = 10\ \text{V}$, $I_D = 170\ \text{mA}$ at $V_{GS} = 4.5\ \text{V}$, $I_D = 170\ \text{mA}$	$R_{DS(ON)}$	- -	- -	6 10	Ω
Input Capacitance at $V_{DS} = 25\ \text{V}$, $f = 1\ \text{MHz}$	C_{iss}	-	73	-	pF
Output Capacitance at $V_{DS} = 25\ \text{V}$, $f = 1\ \text{MHz}$	C_{oss}	-	7	-	pF
Reverse Transfer Capacitance at $V_{DS} = 25\ \text{V}$, $f = 1\ \text{MHz}$	C_{rss}	-	3.4	-	pF
Turn-On Delay Time at $V_{DD} = 30\ \text{V}$, $I_D = 280\ \text{mA}$, $V_{GS} = 10\ \text{V}$, $R_G = 6\ \Omega$	$t_{d(on)}$	-	-	3.4	ns
Turn-On Rise Time at $V_{DD} = 30\ \text{V}$, $I_D = 280\ \text{mA}$, $V_{GS} = 10\ \text{V}$, $R_G = 6\ \Omega$	t_r	-	-	18	ns
Turn-Off Delay Time at $V_{DD} = 30\ \text{V}$, $I_D = 280\ \text{mA}$, $V_{GS} = 10\ \text{V}$, $R_G = 6\ \Omega$	$t_{d(off)}$	-	-	31	ns
Turn-Off Fall Time at $V_{DD} = 30\ \text{V}$, $I_D = 280\ \text{mA}$, $V_{GS} = 10\ \text{V}$, $R_G = 6\ \Omega$	t_f	-	-	5	ns



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