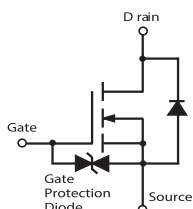


N Channel MOSFET

multicomp^{PRO}

RoHS
Compliant



Features

- V_{DS} (V) = -60V
- I_D = 115mA
- $R_{DS(ON)} < 5\Omega$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 7\Omega$ ($V_{GS} = 5V$)

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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	115	mA
Power Dissipation	P_D	150	mW
Thermal Resistance, Junction- to-Ambient	R_{thJA}	833	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

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

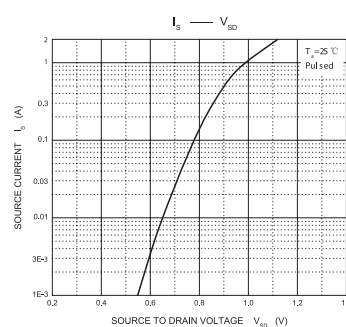
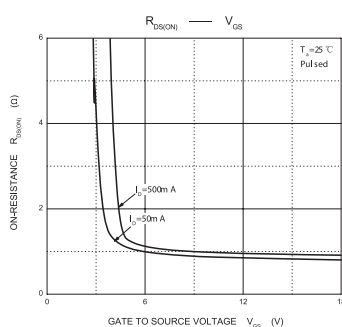
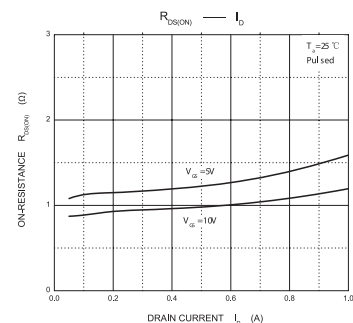
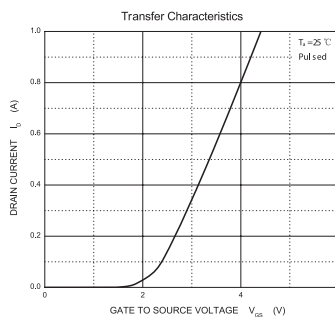
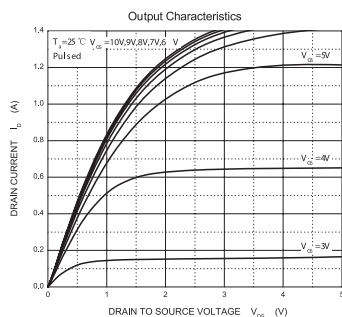
Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D=250\mu\text{A}$, $V_{GS}=0V$	60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60V$, $V_{GS}=0V$			80	nA
Gate-Body Leakage Current	I_{GSS}	$V_{DS}=0V$, $V_{GS}=\pm 20V$			± 80	
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$, $I_D=250\mu\text{A}$	1		2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$, $I_D=500\text{mA}$			5	Ω
		$V_{GS}=5V$, $I_D=50\text{mA}$			7	
On State Drain Current	$I_{D(on)}$	$V_{GS}=10V$, $V_{DS}=7V$	500			mA
Forward Transconductance	g_{FS}	$V_{DS}=10V$, $I_D=0.2A$	80			ms
Input Capacitance	C_{iss}	$V_{GS}=0V$, $V_{DS}=25V$, $f=1\text{MHz}$			50	pF
Output Capacitance	C_{oss}				25	
Reverse Transfer Capacitance	C_{rss}				5	
Turn-On DelayTime	$t_{d(on)}$	$I_{DD}=25V$, $I_D=0.5A$, $V_{GEN}=10V$, $R_L=50\Omega$, $R_{GEN}=25\Omega$			20	ns
Turn-Off DelayTime	$t_{d(off)}$				40	
Drain-source on-voltage	$V_{DS(on)}$	$V_{GS}=10V$, $I_D=500\text{mA}$			3.75	V
		$V_{GS}=5V$, $I_D=50\text{mA}$			0.375	
Diode Forward Voltage	V_{SD}	$I_S=115\text{mA}$, $V_{GS}=0V$	0.55		1.2	

Note: 2. Short duration test pulse used to minimize self-heating effect.

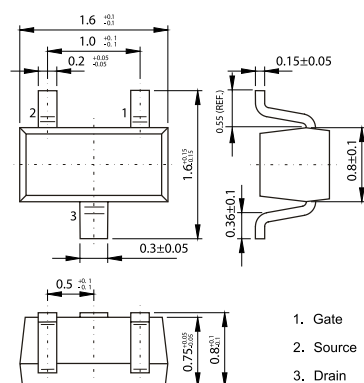
Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

multicomp^{PRO}

Typical Characteristics



Diagram



Dimensions : Millimetres

Part Number Table

Description	Part Number
MOSFET, N Channel, 0.115A, 60V, SOT523	2N7002T

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