

Transistors

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Gate-source leakage	I_{GSS}	–	–	10	μA	$V_{GS}=20V, V_{DS}=0V$
Drain-source breakdown voltage	$V_{(BR) DSS}$	30	–	–	V	$I_D=1mA, V_{GS}=0V$
Zero gate voltage drain current	I_{DSS}	–	–	1	μA	$V_{DS}=30V, V_{GS}=0V$
Gate threshold voltage	$V_{GS(th)}$	1.0	–	2.5	V	$V_{DS}=10V, I_D=1mA$
Static drain-source on-state resistance	$R_{DS(on)}$ *	–	50	70	m Ω	$I_D=2.5A, V_{GS}=10V$
		–	74	105		$I_D=2.5A, V_{GS}=4.5V$
		–	83	118		$I_D=2.5A, V_{GS}=4V$
Forward transfer admittance	$ Y_{fs} $ *	1.5	–	–	S	$I_D=2.5A, V_{DS}=10V$
Input capacitance	C_{iss}	–	165	–	pF	$V_{DS}=10V$
Output capacitance	C_{oss}	–	55	–	pF	$V_{GS}=0V$
Reverse transfer capacitance	C_{rss}	–	35	–	pF	$f=1MHz$
Turn-on delay time	$t_{d(on)}$ *	–	6	–	ns	$I_D=1.25A, V_{DD}\hat{=}15V$
Rise time	t_r *	–	10	–	ns	$V_{GS}=10V$
Turn-off delay time	$t_{d(off)}$ *	–	20	–	ns	$R_L=12.0\Omega$
Fall time	t_f *	–	5	–	ns	$R_G=10\Omega$
Total gate charge	Q_g *	–	2.9	4.1	nC	$V_{DD}\hat{=}15V$
Gate-source charge	Q_{gs} *	–	0.8	–	nC	$V_{GS}=5V$
Gate-drain charge	Q_{gd} *	–	0.9	–	nC	$I_D=2.5A$

*Pulsed

●Body diode characteristics (Source-Drain) (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{SD} *	–	–	1.2	V	$I_S=3.2A, V_{GS}=0V$

*Pulsed

Transistors

●Electrical characteristic curves

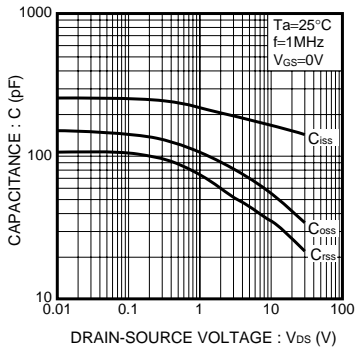


Fig.1 Typical Capacitance vs. Drain-Source Voltage

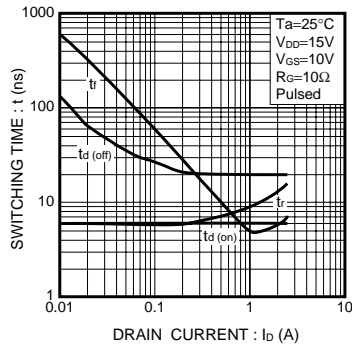


Fig.2 Switching Characteristics

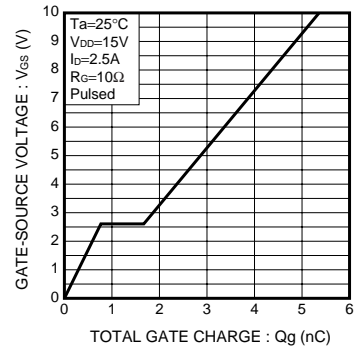


Fig.3 Dynamic Input Characteristics

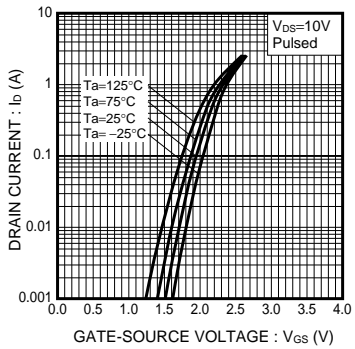


Fig.4 Typical Transfer Characteristics

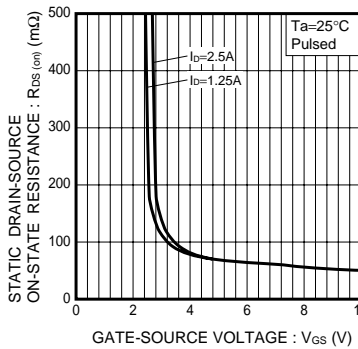


Fig.5 Static Drain-Source On-State Resistance vs. Gate-Source Voltage

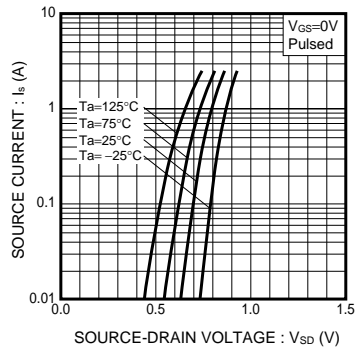


Fig.6 Source Current vs. Source-Drain Voltage

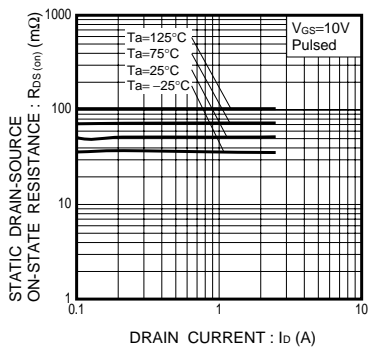


Fig.7 Static Drain-Source On-State Resistance vs. Drain Current (I)

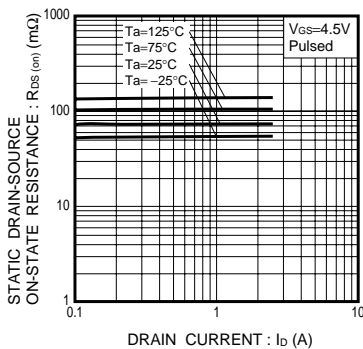


Fig.8 Static Drain-Source On-State Resistance vs. Drain Current (II)

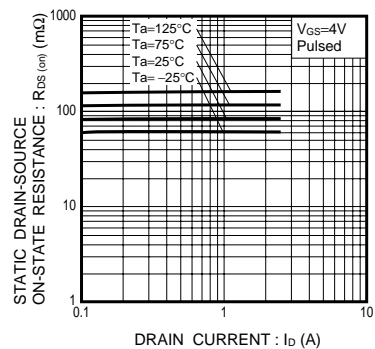


Fig.9 Static Drain-Source On-State Resistance vs. Drain Current (III)

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