



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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ELECTRICAL CHARACTERISTICS

DC Characteristics

Ta = 25°C

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Drain Cut-Off Current	I _{dss}	V _{ds} = 20V, V _{gs} = 0V	-	-	10	μA
Gate-Source Leak Current	I _{gss}	V _{gs} = ±8V, V _{ds} = 0V	-	-	±10	μA
Gate-Source Cut-Off Voltage	V _{gs(off)}	I _d = 1mA, V _{ds} = 10V	0.5	-	1.2	V
Drain-Source On-State Resistance *1	R _{ds(on)}	I _d = 0.5A, V _{gs} = 4.5V	-	0.075	0.100	Ω
		I _d = 0.5A, V _{gs} = 2.5V	-	0.10	0.14	Ω
		I _d = 0.1A, V _{gs} = 1.5V	-	0.17	0.25	Ω
Forward Transfer Admittance *1	Y _{fs}	I _d = 0.5A, V _{ds} = 10V	-	4.2	-	S
Body Drain Diode Forward Voltage	V _f	I _f = 1A, V _{gs} = 0V	-	0.8	1.1	V

*1 Effective during pulse test.

Dynamic Characteristics

Ta = 25°C

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Input Capacitance	C _{iss}	V _{ds} = 10V, V _{gs} =0V f= 1MHz	-	220	-	pF
Output Capacitance	C _{oss}		-	120	-	pF
Feedback Capacitance	C _{rss}		-	45	-	pF

Switching Characteristics

Ta = 25°C

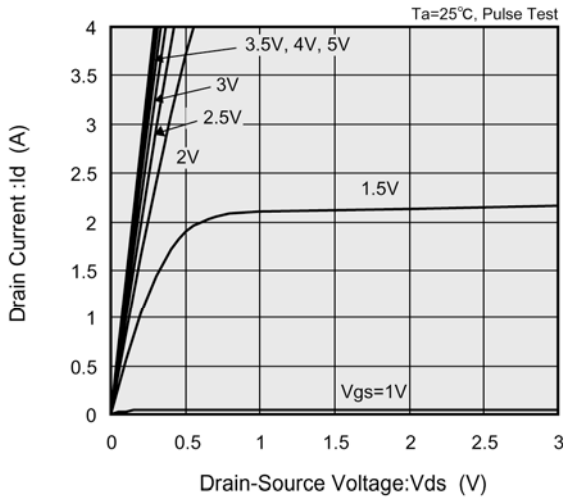
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Turn-On Delay Time	t _{d (on)}	V _{gs} = 5V, I _d = 0.5A V _{dd} = 10V	-	10	-	ns
Rise Time	t _r		-	15	-	ns
Turn-Off Delay Time	t _{d (off)}		-	75	-	ns
Fall Time	t _f		-	65	-	ns

Thermal Characteristics

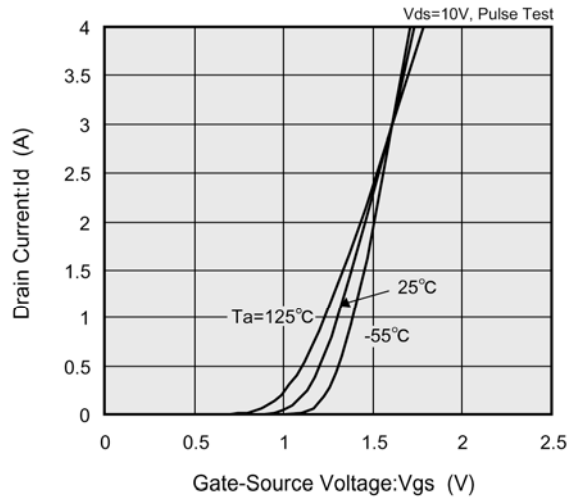
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Thermal Resistance (Channel-Ambience)	R _{th (ch-a)}	Implement on a ceramic PCB	-	250	-	°C/W

■ TYPICAL PERFORMANCE CHARACTERISTICS

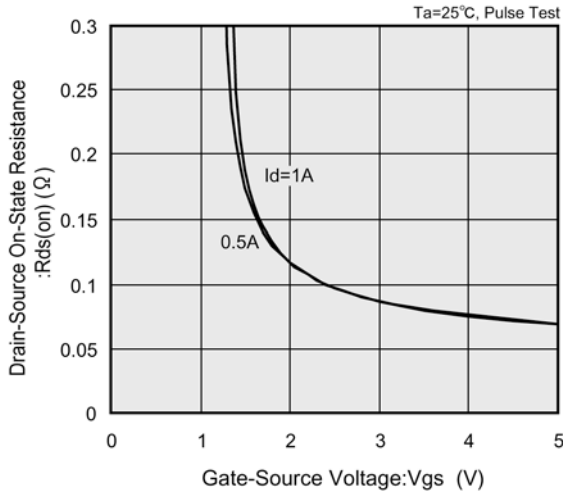
(1) Drain Current vs. Drain-Source Voltage



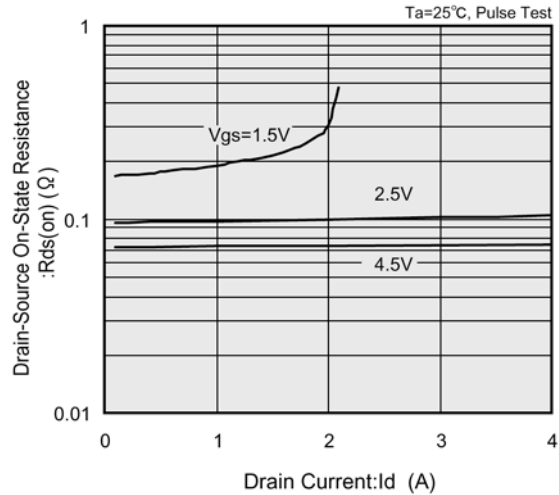
(2) Drain Current vs. Gate-Source Voltage



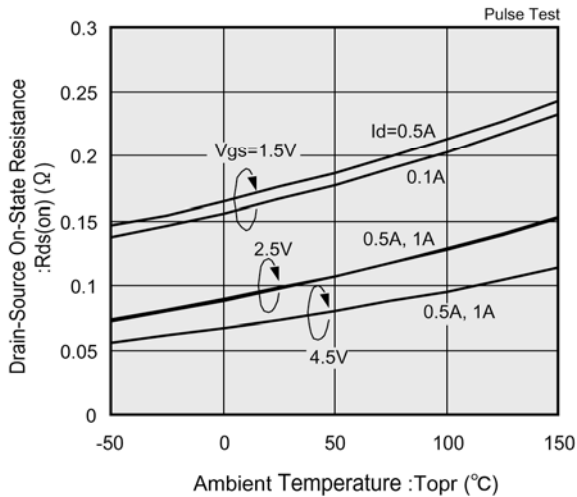
(3) Drain-Source On-State Resistance vs. Gate-Source Voltage



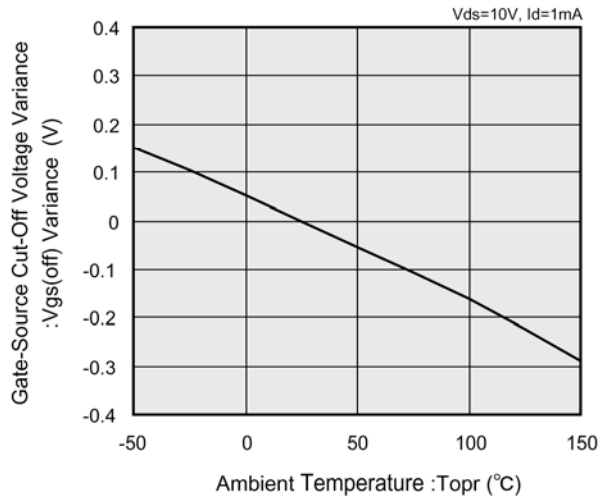
(4) Drain-Source On-State Resistance vs. Drain Current



(5) Drain-Source On-State Resistance vs. Ambient Temperature

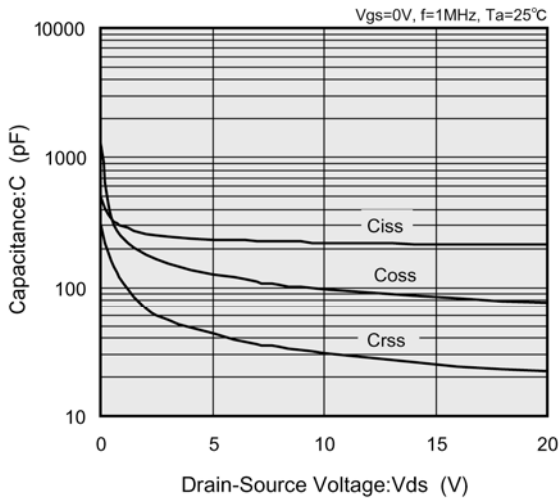


(6) Gate-Source Cut-Off Voltage Variance vs. Ambient Temperature

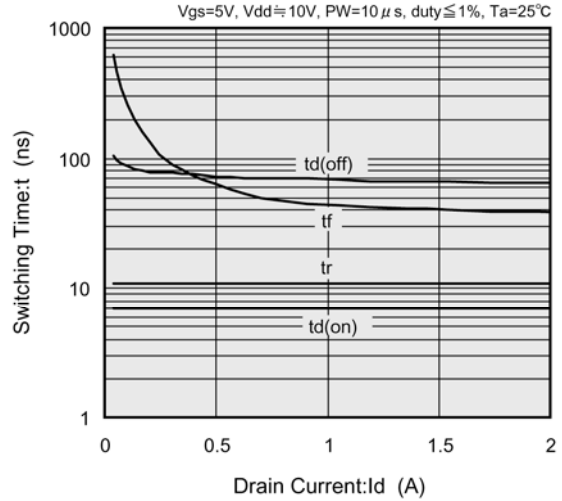


TYPICAL PERFORMANCE CHARACTERISTICS (Continued)

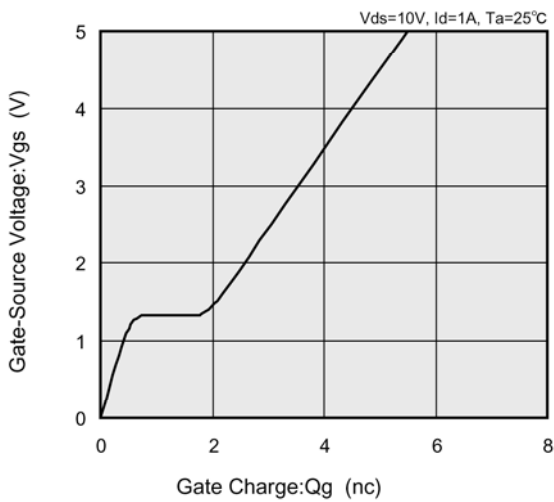
(7) Capacitance vs. Drain-Source Voltage



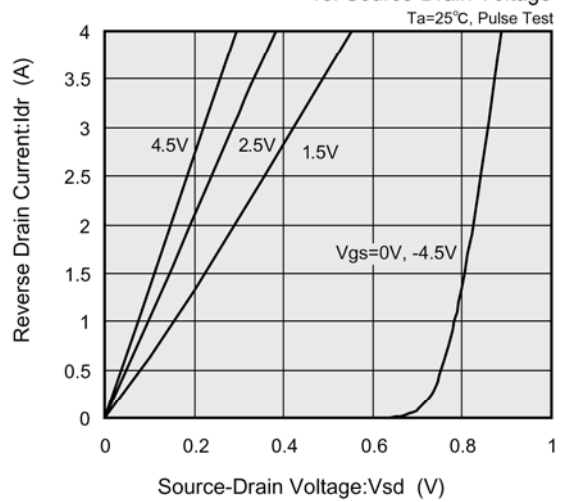
(8) Switching Time vs. Drain Current



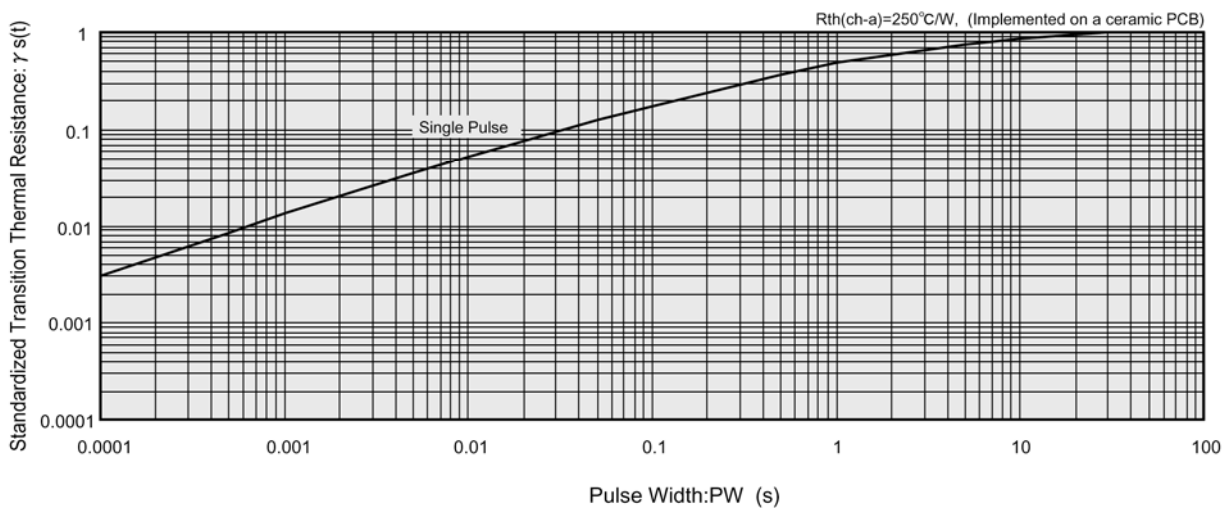
(9) Gate-Source Voltage vs. Gate Charge



(10) Reverse Drain Current vs. Source-Drain Voltage



(11) Standardized transition Thermal Resistance vs. Pulse Width



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