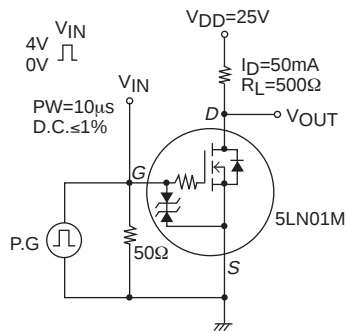


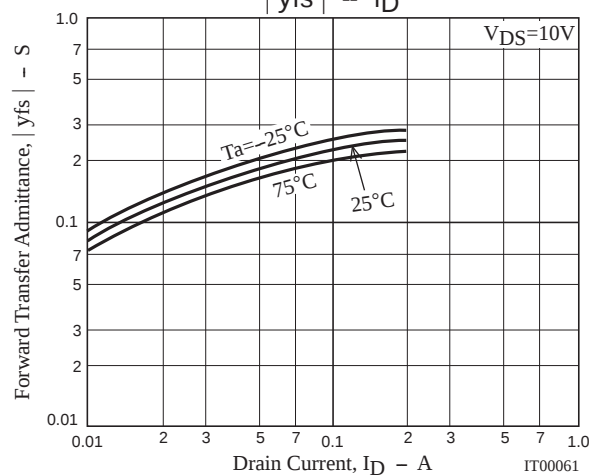
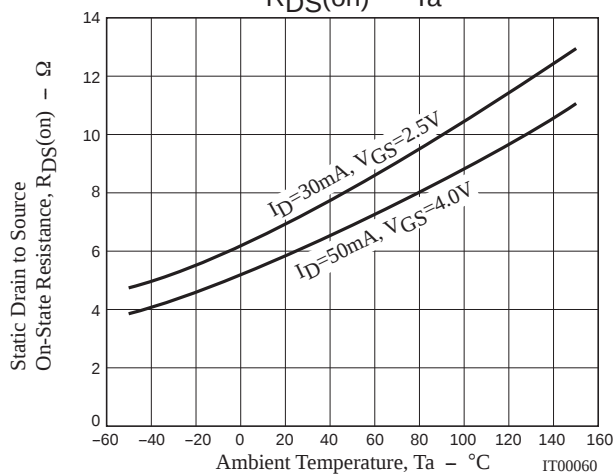
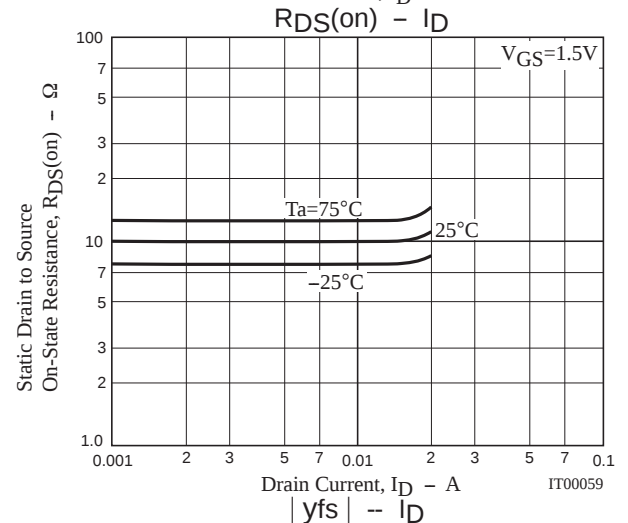
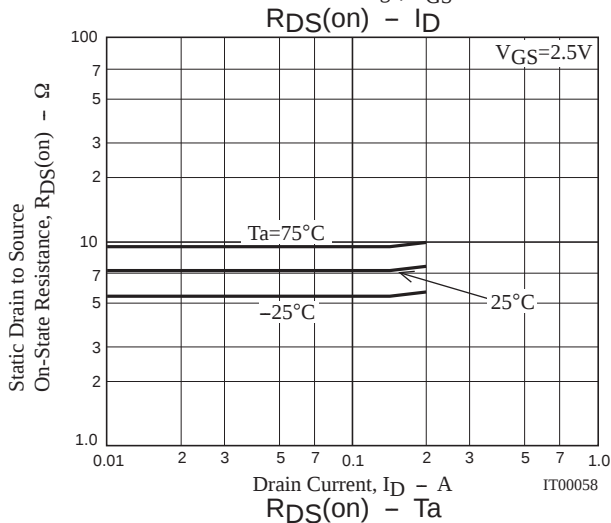
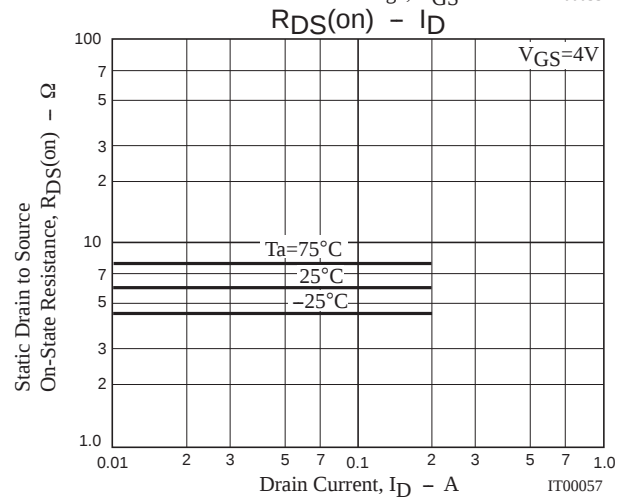
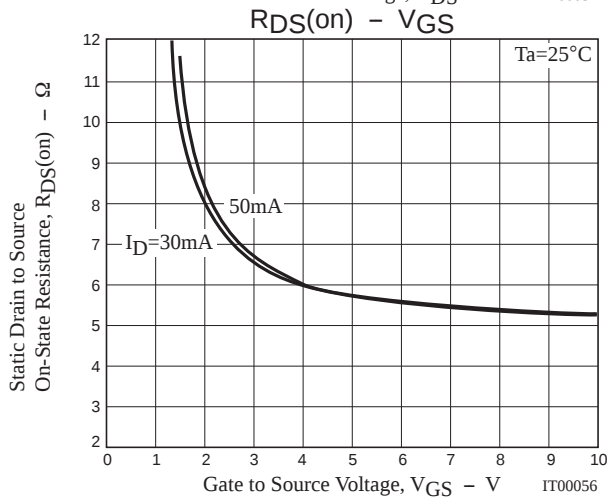
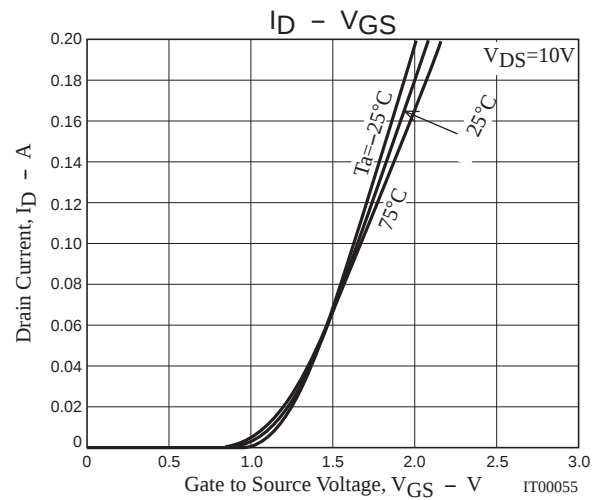
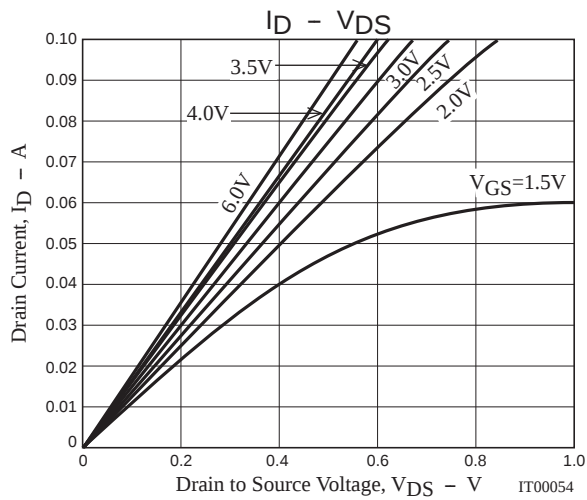
5LN01M

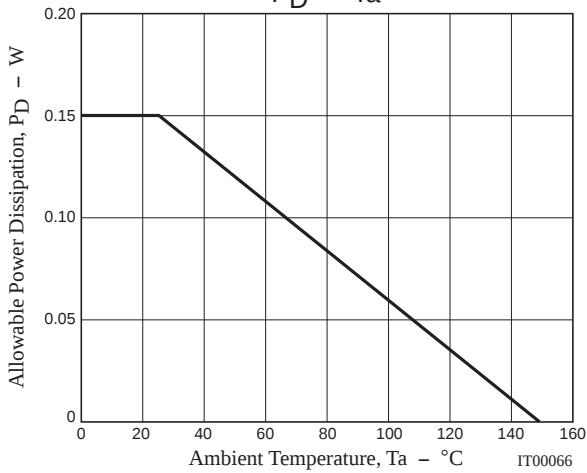
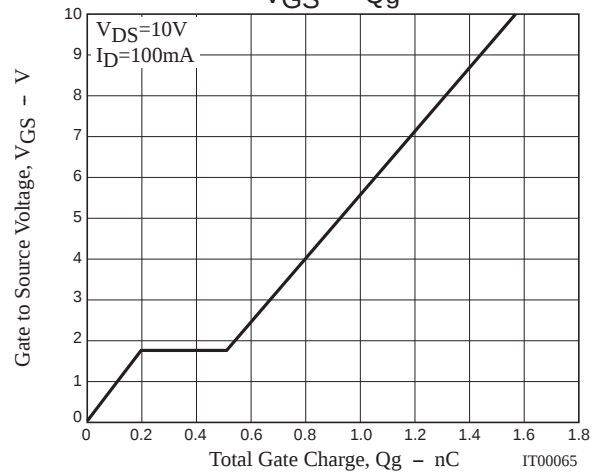
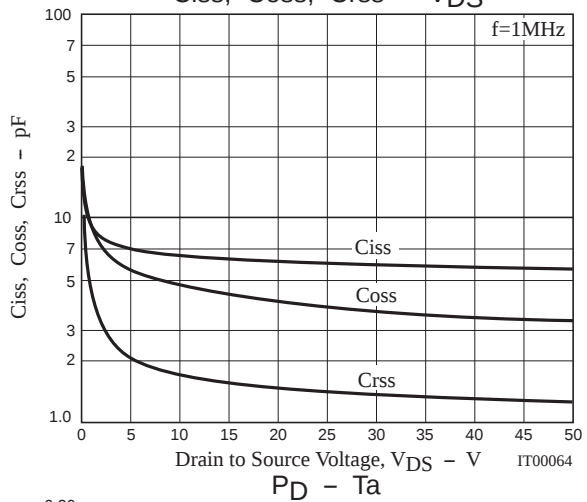
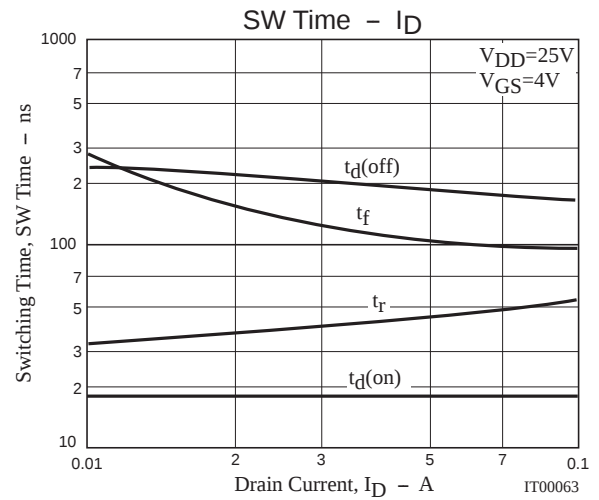
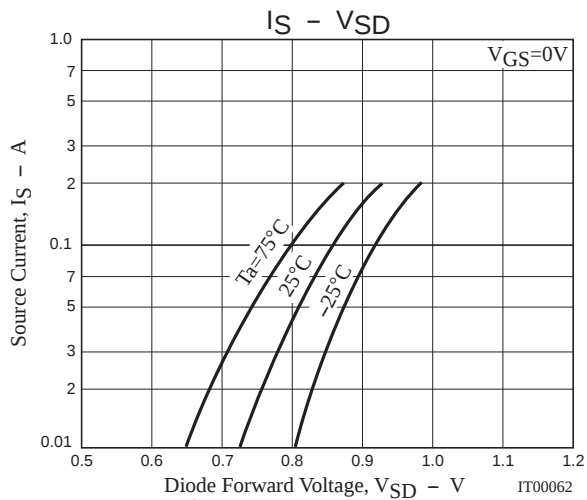
Electrical Characteristics at $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=1\text{mA}$, $V_{GS}=0\text{V}$	50			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=50\text{V}$, $V_{GS}=0\text{V}$			1	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS}=\pm 8\text{V}$, $V_{DS}=0\text{V}$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}$, $I_D=100\mu\text{A}$	0.4		1.3	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10\text{V}$, $I_D=50\text{mA}$	0.13	0.18		S
Static Drain to Source On-State Resistance	$R_{DS(on)1}$	$I_D=50\text{mA}$, $V_{GS}=4\text{V}$		6	7.8	Ω
	$R_{DS(on)2}$	$I_D=30\text{mA}$, $V_{GS}=2.5\text{V}$		7.1	9.9	Ω
	$R_{DS(on)3}$	$I_D=10\text{mA}$, $V_{GS}=1.5\text{V}$		10	20	Ω
Input Capacitance	C_{iss}	$V_{DS}=10\text{V}$, $f=1\text{MHz}$		6.6		pF
Output Capacitance	C_{oss}			4.7		pF
Reverse Transfer Capacitance	C_{rss}			1.7		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		18		ns
Rise Time	t_r			42		ns
Turn-OFF Delay Time	$t_{d(off)}$			190		ns
Fall Time	t_f			105		ns
Total Gate Charge	Q_g	$V_{DS}=10\text{V}$, $V_{GS}=10\text{V}$, $I_D=100\text{mA}$		1.57		nC
Gate to Source Charge	Q_{gs}			0.20		nC
Gate to Drain "Miller" Charge	Q_{gd}			0.32		nC
Diode Forward Voltage	V_{SD}	$I_S=100\text{mA}$, $V_{GS}=0\text{V}$		0.85	1.2	V

Switching Time Test Circuit

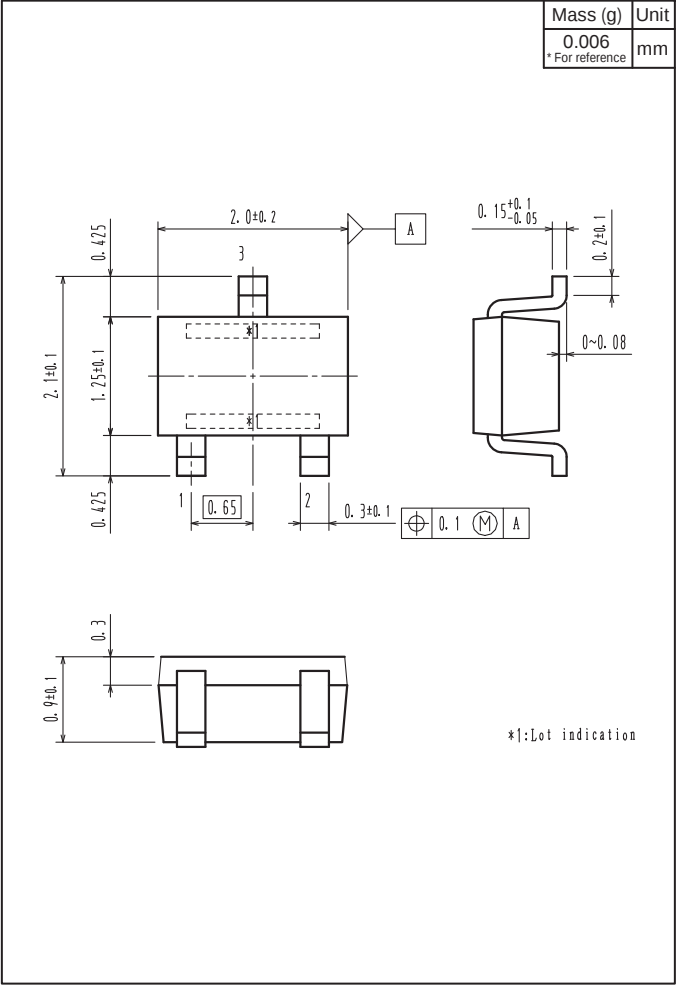




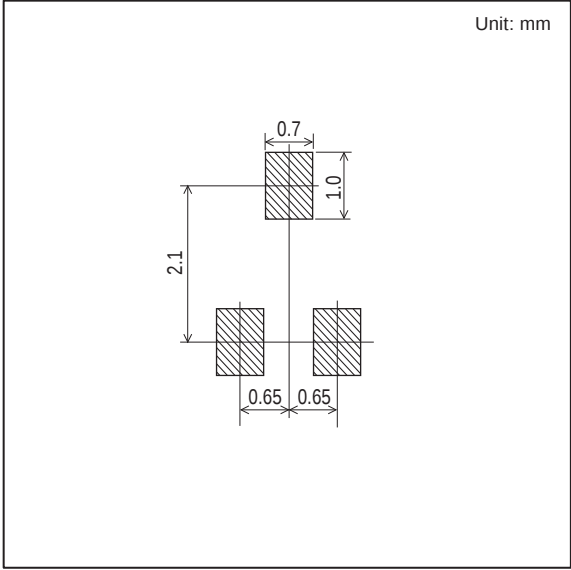


Outline Drawing

5LN01M-TL-E, 5LN01M-TL-H



Land Pattern Example



Note on usage : Since the 5LN01M is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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