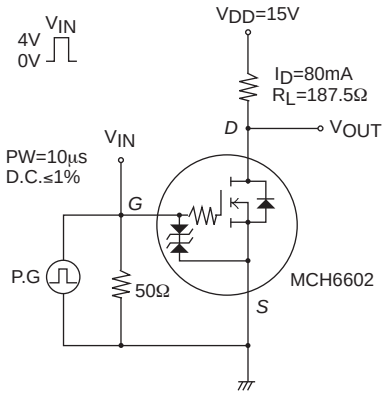
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	30			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=30V, V_{GS}=0V			1	μA
Gate to Source Leakage Current	I_{GSS}	V_{GS}=±8V, V_{DS}=0V			±10	μA
Cutoff Voltage	V_{GS}(off)	V_{DS}=10V, I_D=100μA	0.4		1.3	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, I_D=80mA	0.15	0.22		S
Static Drain to Source On-State Resistance	R_{DS}(on)1	I_D=80mA, V_{GS}=4V		2.9	3.7	Ω
	R_{DS}(on)2	I_D=40mA, V_{GS}=2.5V		3.7	5.2	Ω
	R_{DS}(on)3	I_D=10mA, V_{GS}=1.5V		6.4	12.8	Ω
Input Capacitance	Ciss	V_{DS}=10V, f=1MHz		7.0		pF
Output Capacitance	Coss			5.9		pF
Reverse Transfer Capacitance	Crss			2.3		pF
Turn-ON Delay Time	t_d(on)	See specified Test Circuit.		19		ns
Rise Time	t_r			65		ns
Turn-OFF Delay Time	t_d(off)			155		ns
Fall Time	t_f			120		ns
Total Gate Charge	Qg	V_{DS}=10V, V_{GS}=10V, I_D=150mA		1.58		nC
Gate to Source Charge	Qgs			0.26		nC
Gate to Drain “Miller” Charge	Qgd			0.31		nC
Diode Forward Voltage	V_{SD}	I_S=150mA, V_{GS}=0V		0.87	1.2	V

Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
MCH6602-TL-E	MCPH6	3,000pcs./reel	Pb-Free

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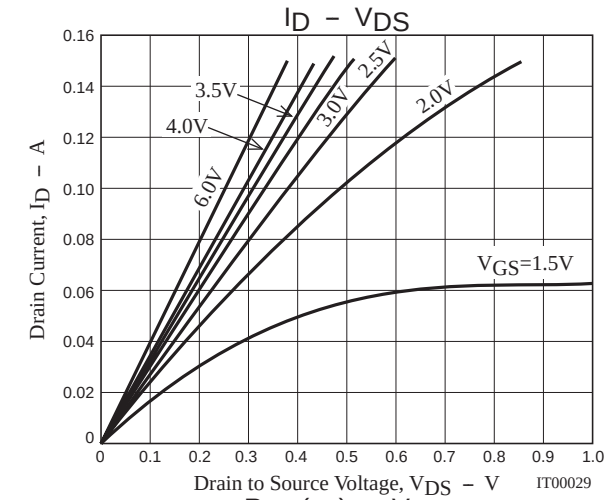

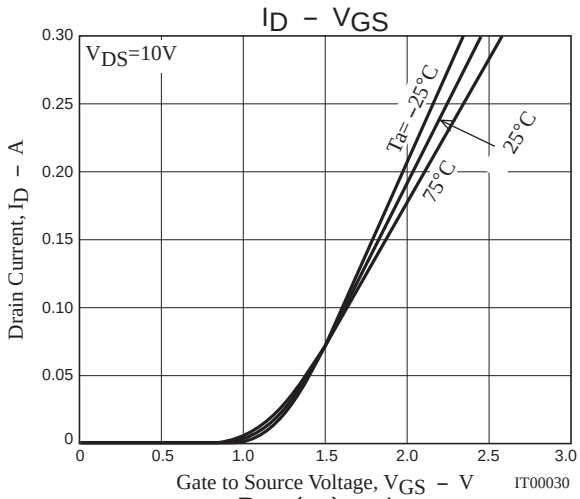

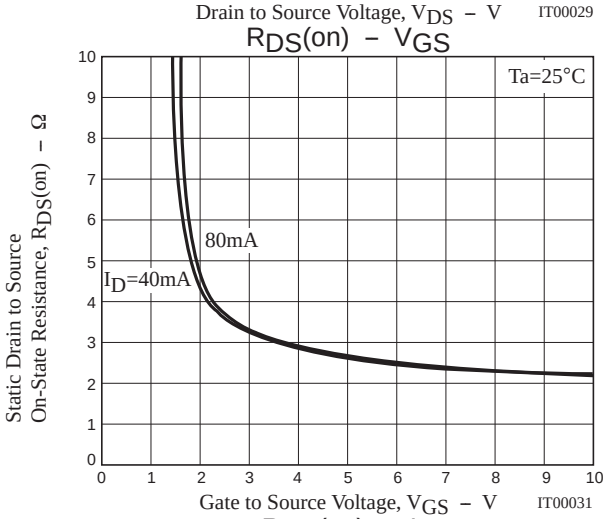

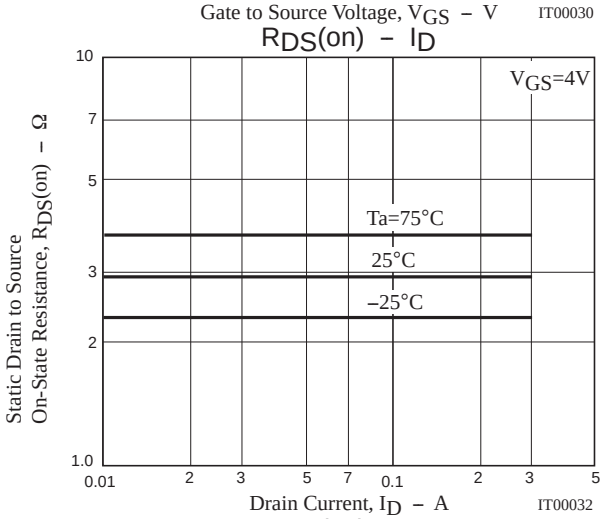

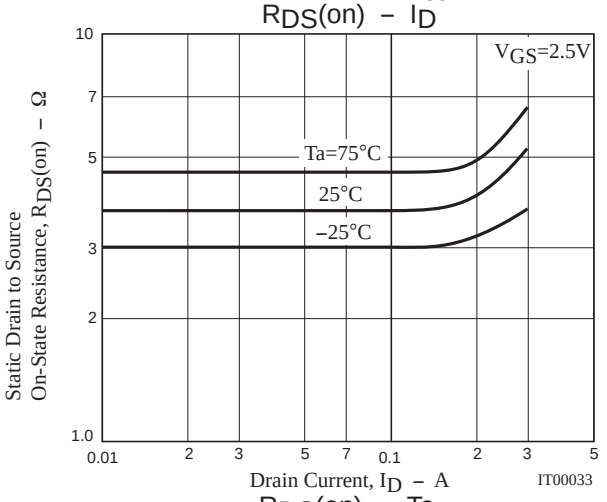

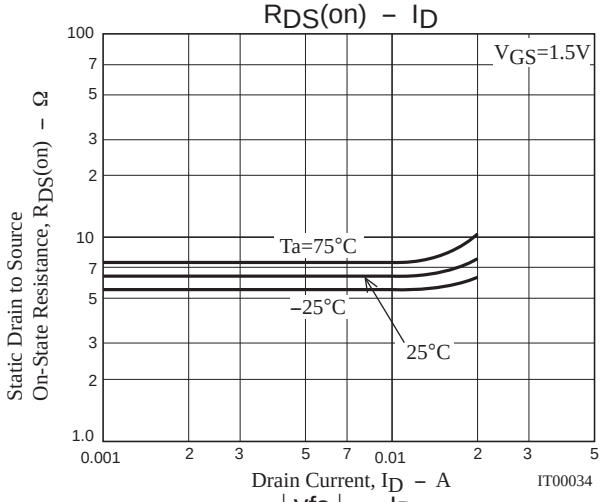

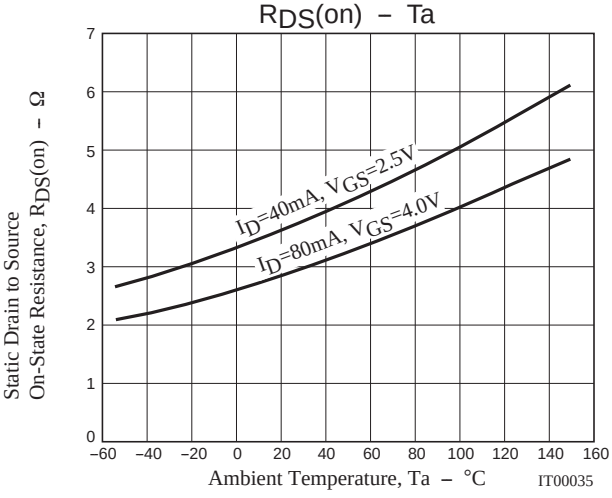

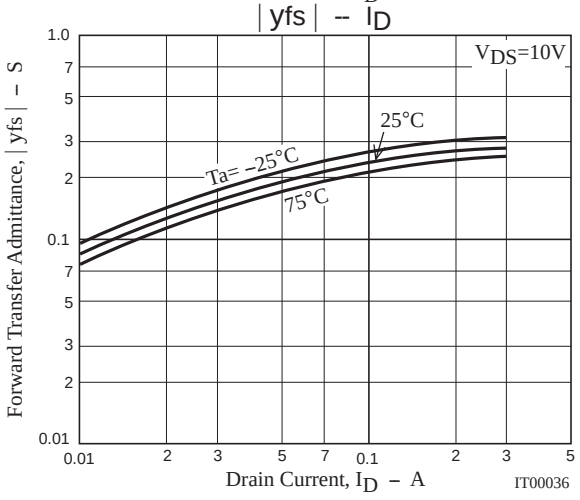

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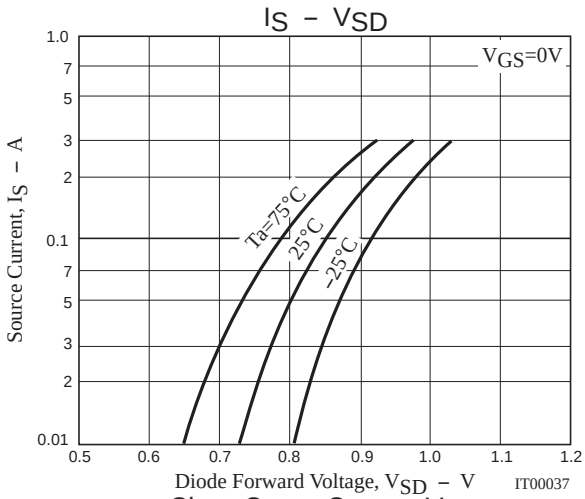

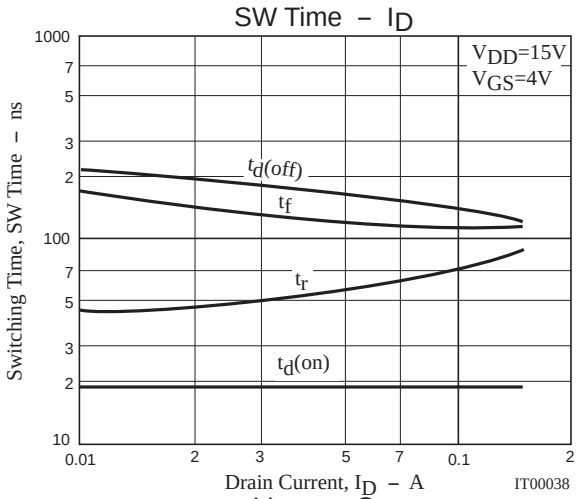

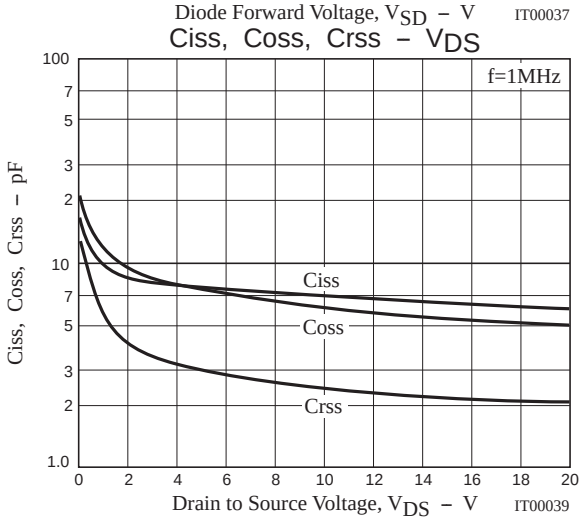

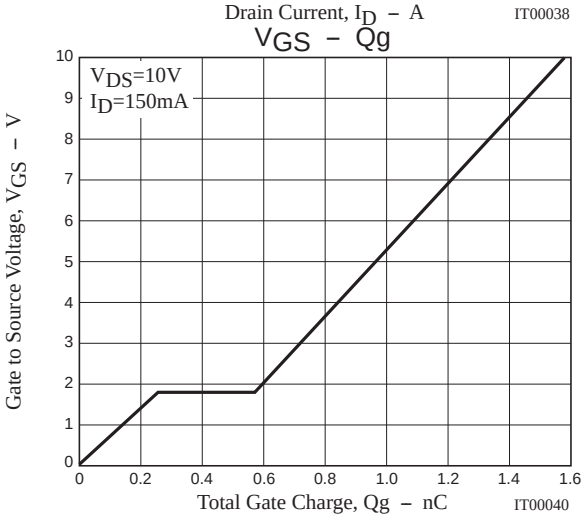

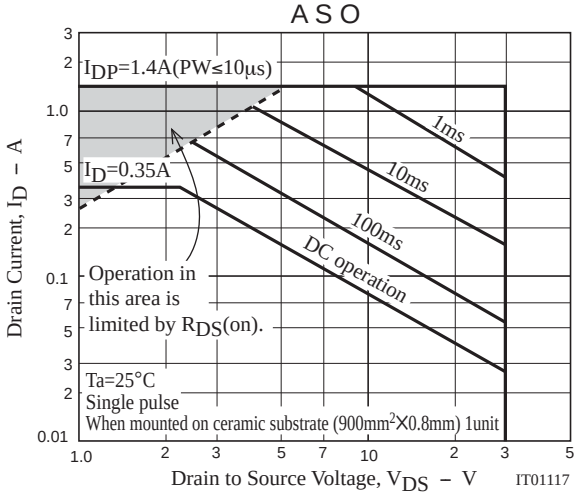

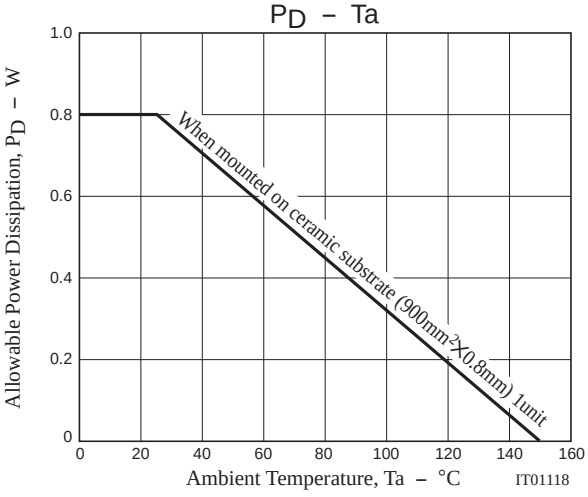

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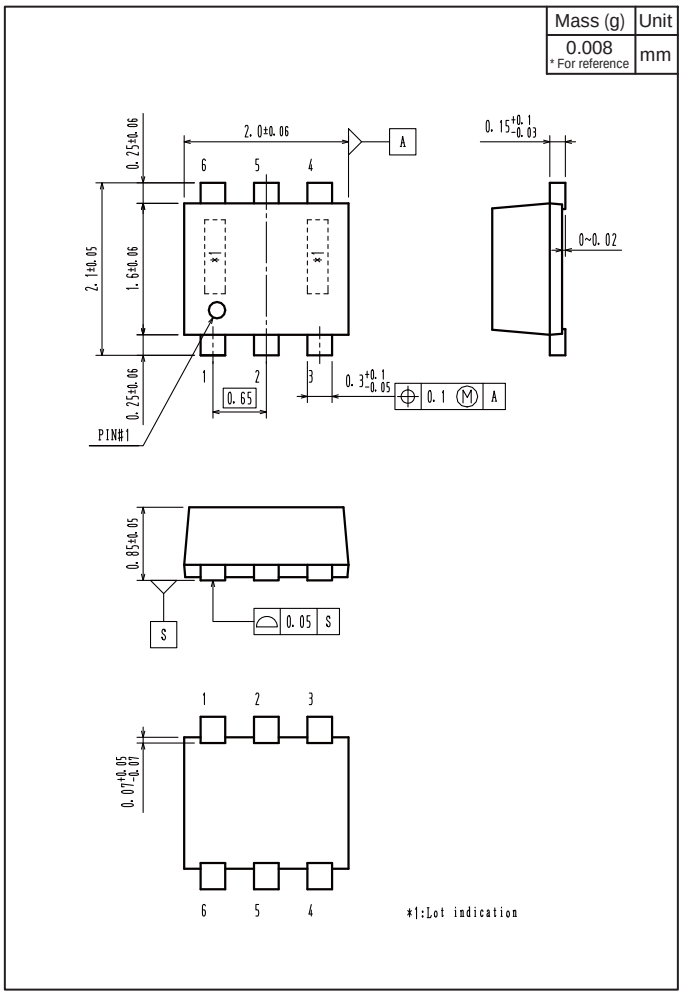
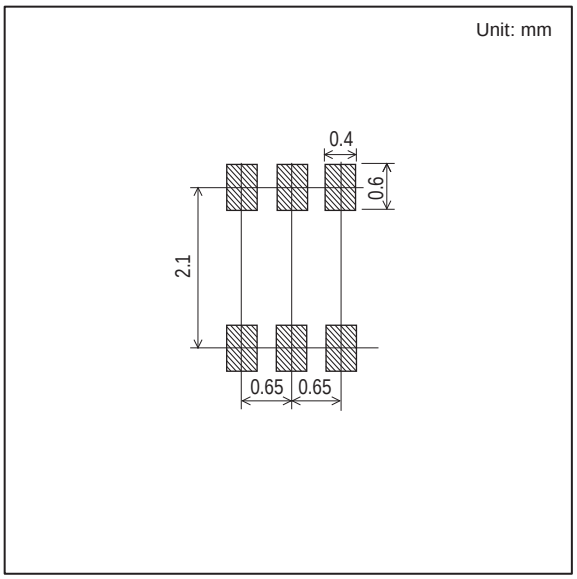
Outline Drawing

MCH6602-TL-E



Land Pattern Example



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Note on usage : Since the MCH6602 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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