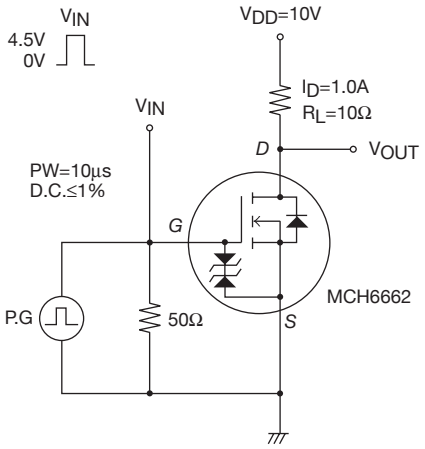
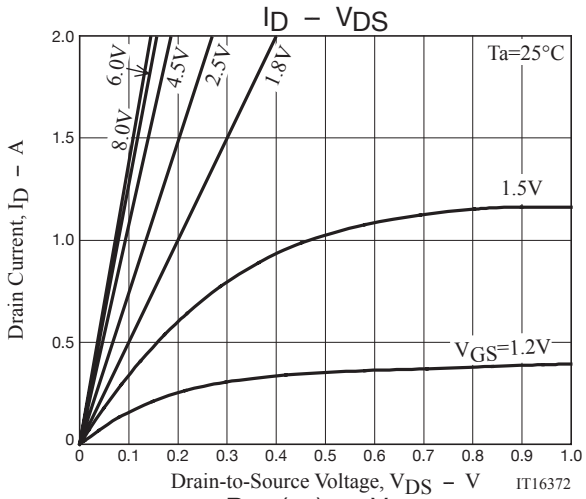
Electrical Characteristics at Ta=25°C

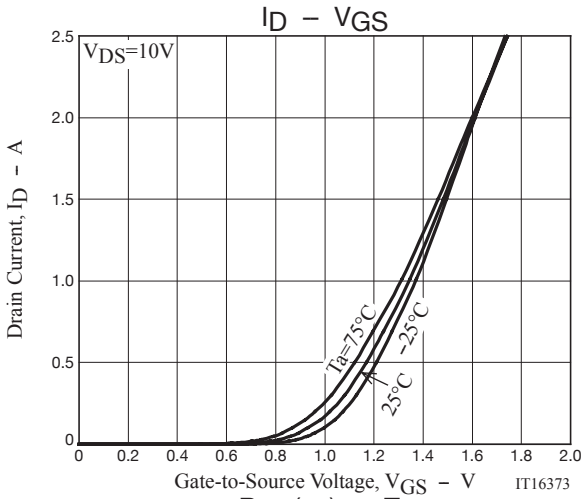
Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	20			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V, V_{GS}=0V			1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±8V, V_{DS}=0V			±10	μA
Gate Threshold Voltage	$V_{GS}(th)$	V_{DS}=10V, I_D=1mA	0.4		1.3	V
Forward Transconductance	g_{FS}	V_{DS}=10V, I_D=1A		1.9		S
Static Drain-to-Source On-State Resistance	$R_{DS}(on)1$	I_D=1.0A, V_{GS}=4.5V		120	160	mΩ
	$R_{DS}(on)2$	I_D=0.5A, V_{GS}=2.5V		170	240	mΩ
	$R_{DS}(on)3$	I_D=0.1A, V_{GS}=1.8V		255	380	mΩ
Input Capacitance	Ciss	V_{DS}=10V, f=1MHz		128		pF
Output Capacitance	Coss			28		pF
Reverse Transfer Capacitance	Crss			21		pF
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit.		5.1		ns
Rise Time	t_r			11		ns
Turn-OFF Delay Time	$t_d(off)$			14.5		ns
Fall Time	t_f			12		ns
Total Gate Charge	Qg	V_{DS}=10V, V_{GS}=4.5V, I_D=2A		1.8		nC
Gate-to-Source Charge	Qgs			0.3		nC
Gate-to-Drain “Miller” Charge	Qgd			0.55		nC
Forward Diode Voltage	V_{SD}	I_S=2A, V_{GS}=0V		0.85	1.2	V

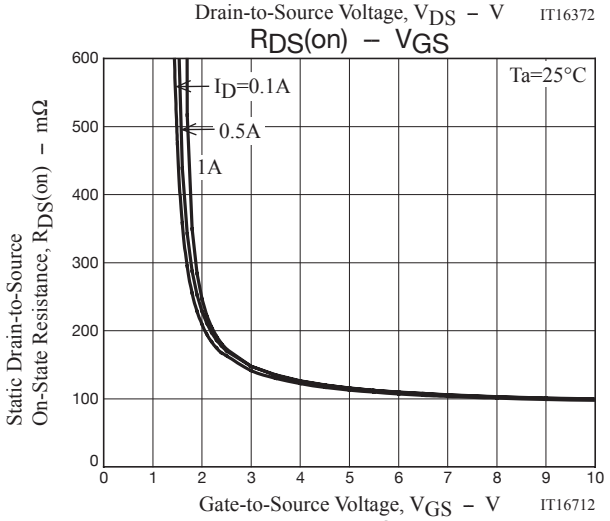
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

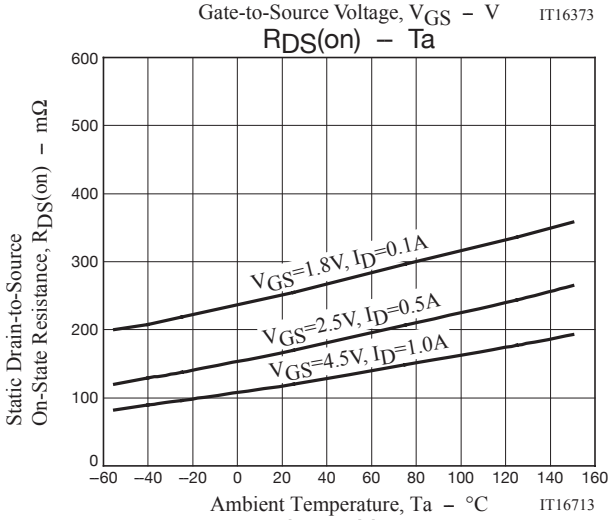
Switching Time Test Circuit

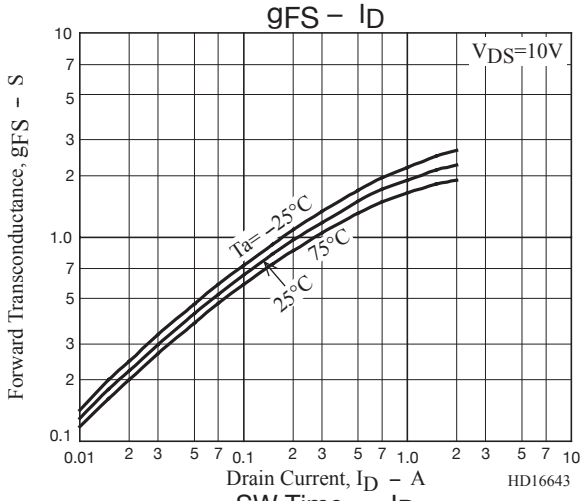


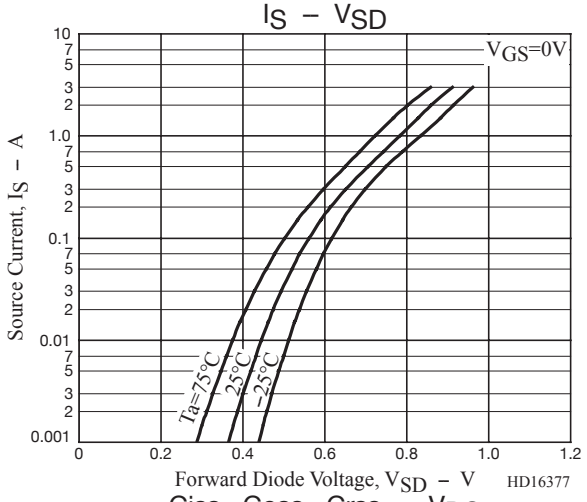


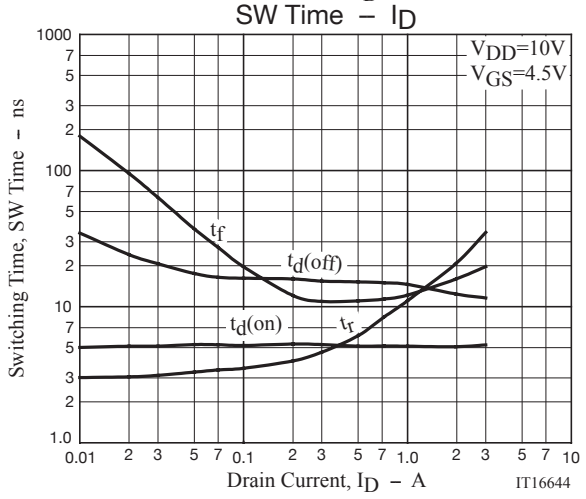


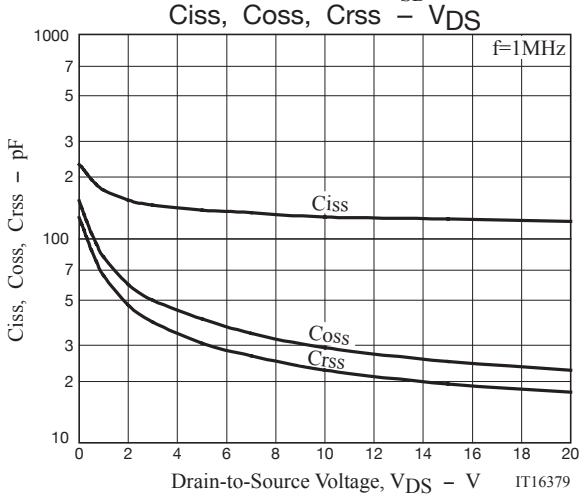


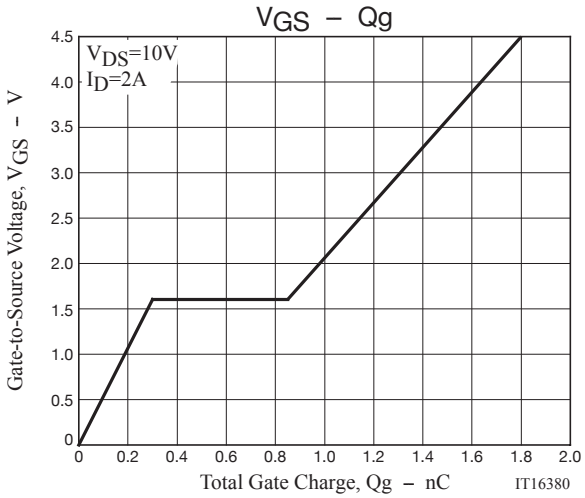


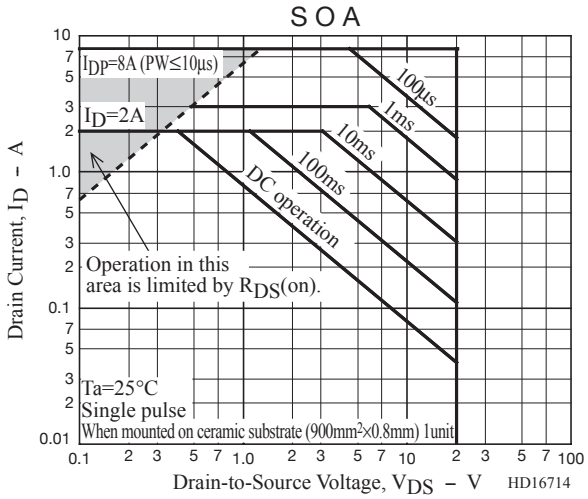


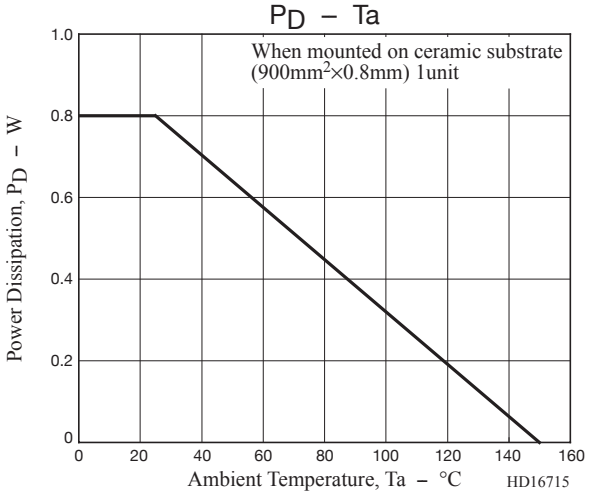


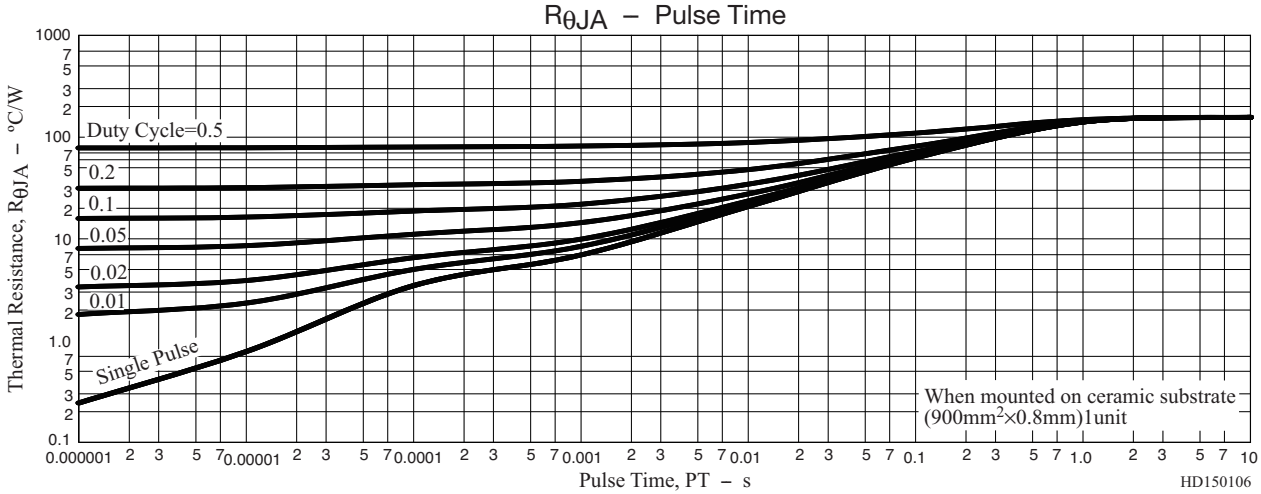










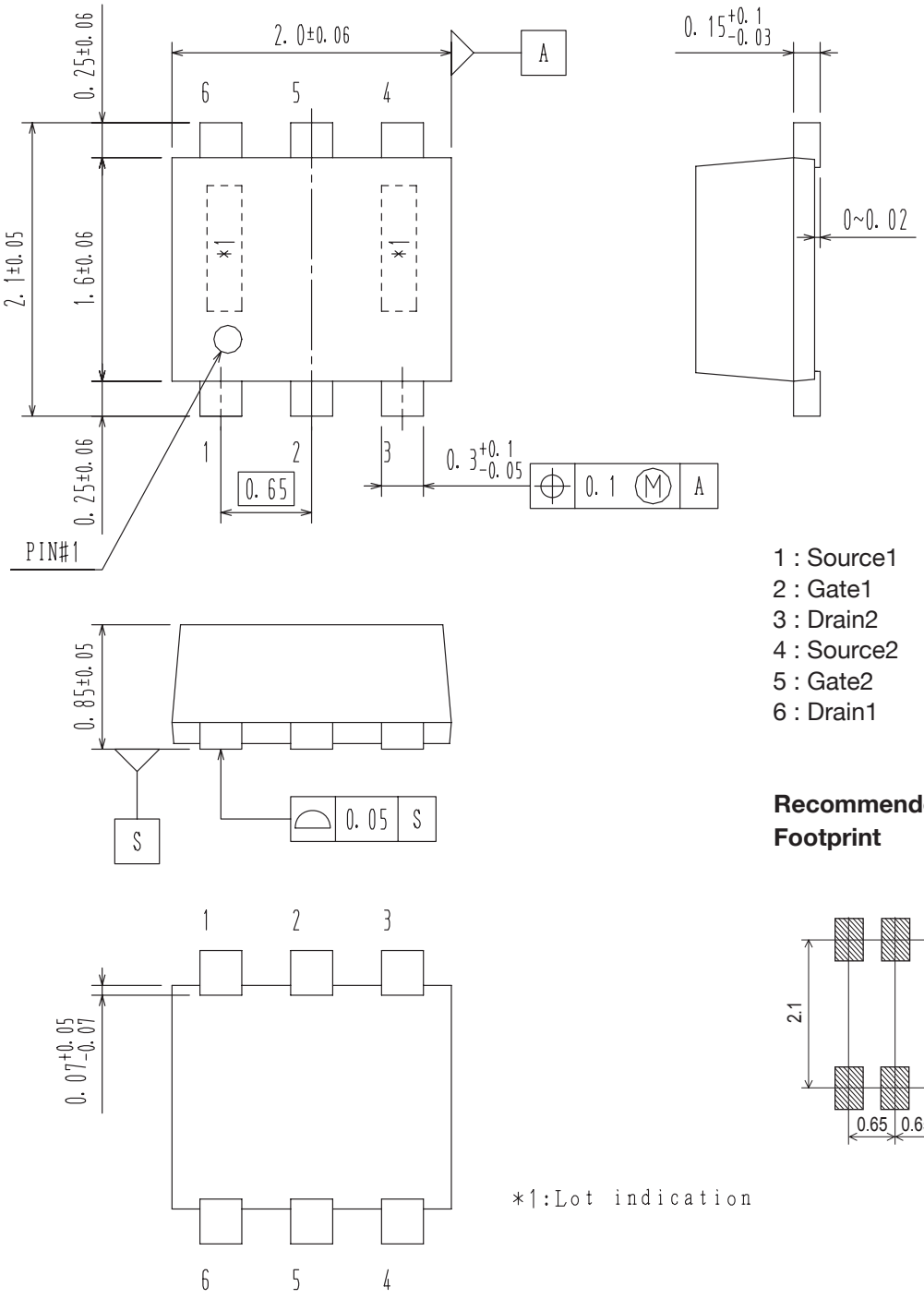


Package Dimensions

unit : mm

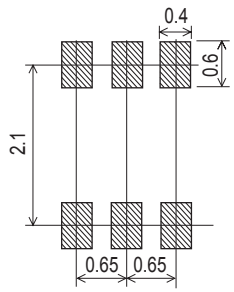
MCH6662-TL-H, MCH6662-TL-W

SC-88FL / MCPH6
CASE 419AS
ISSUE O



1 : Source1
2 : Gate1
3 : Drain2
4 : Source2
5 : Gate2
6 : Drain1

Recommended Soldering Footprint



*1:Lot indication

ORDERING INFORMATION

Device	Package	Shipping	memo
MCH6662-TL-H	MCPH6	3,000pcs./reel	Pb-Free and Halogen Free
MCH6662-TL-W			

Note on usage : Since the MCH6662 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.