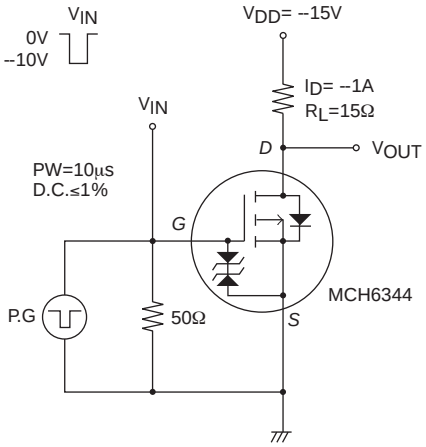
Electrical Characteristics at Ta=25°C

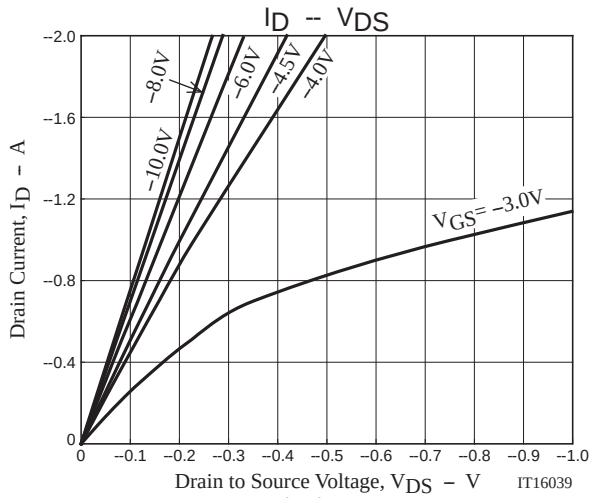
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=−1mA, V_{GS}=0V	−30			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=−30V, V_{GS}=0V			−1	μA
Gate to Source Leakage Current	I_{GSS}	V_{GS}=±16V, V_{DS}=0V			±10	μA
Cutoff Voltage	V_{GS}(off)	V_{DS}=−10V, I_D=−1mA	−1.2		−2.6	V
Forward Transfer Admittance	| yfs |	V_{DS}=−10V, I_D=−1A		1.9		S
Static Drain to Source On-State Resistance	R_{DS}(on)1	I_D=−1A, V_{GS}=−10V		115	150	mΩ
	R_{DS}(on)2	I_D=−0.5A, V_{GS}=−4.5V		182	255	mΩ
	R_{DS}(on)3	I_D=−0.5A, V_{GS}=−4V		208	292	mΩ
Input Capacitance	Ciss	V_{DS}=−10V, f=1MHz		172		pF
Output Capacitance	Coss			51		pF
Reverse Transfer Capacitance	Crss			36		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		4.5		ns
Rise Time	t_r			4.2		ns
Turn-OFF Delay Time	$t_{d(off)}$			20		ns
Fall Time	t_f			10.6		ns
Total Gate Charge	Qg	V_{DS}=−15V, V_{GS}=−10V, I_D=−2A		3.9		nC
Gate to Source Charge	Qgs			0.6		nC
Gate to Drain “Miller” Charge	Qgd			0.8		nC
Diode Forward Voltage	V_{SD}	I_S=−2A, V_{GS}=0V		−0.86	−1.5	V

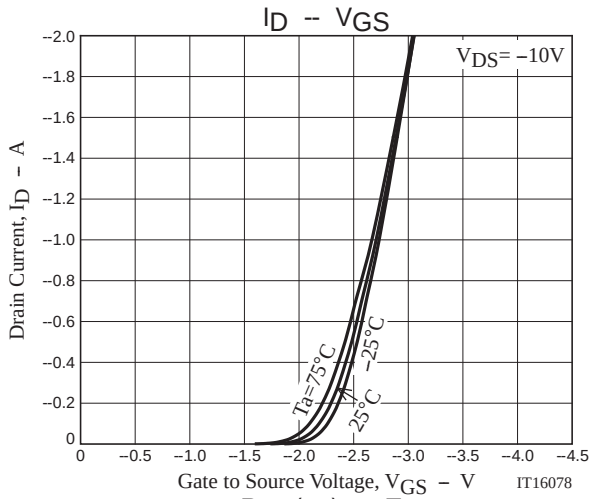
Switching Time Test Circuit

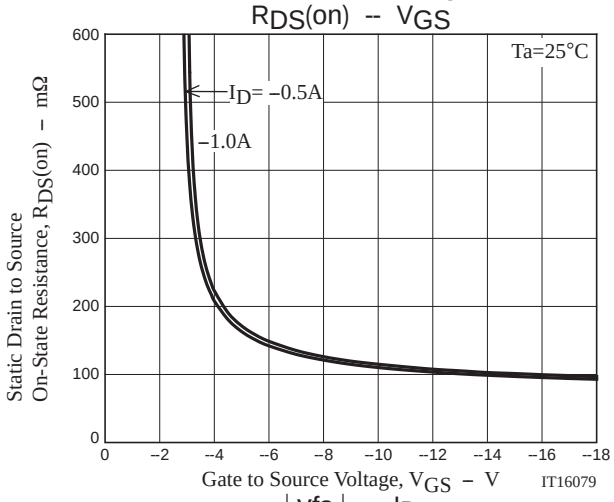


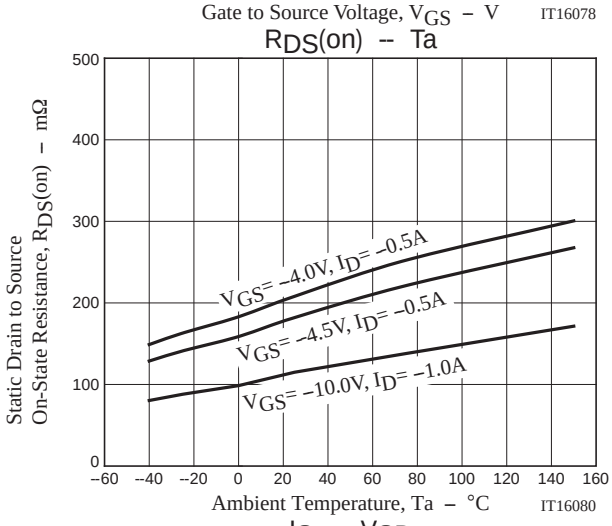
Ordering Information

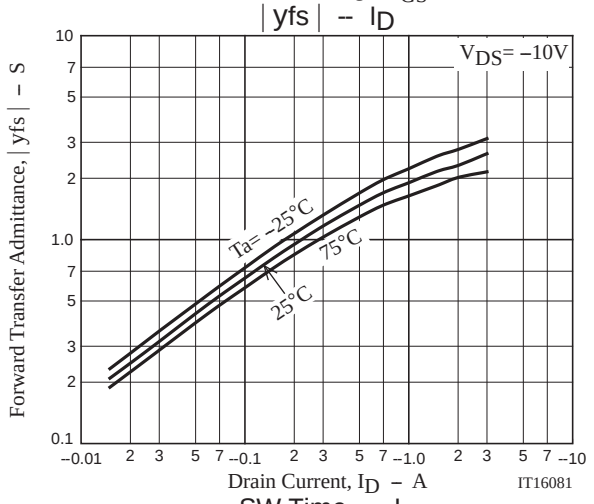
Device	Package	Shipping	memo
MCH6344-TL-H	MCPH6	3,000pcs./reel	Pb-Free and Halogen Free

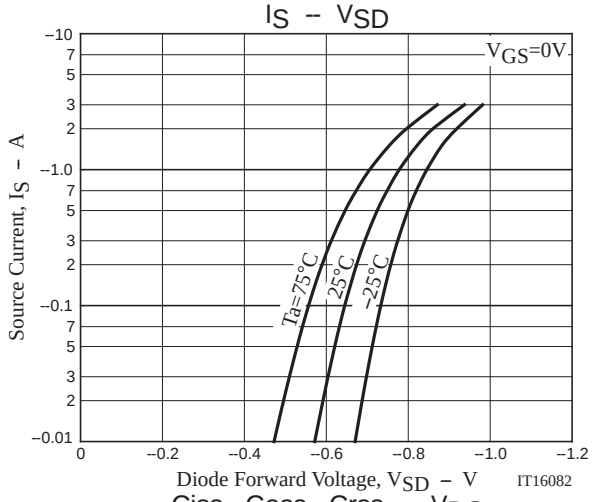


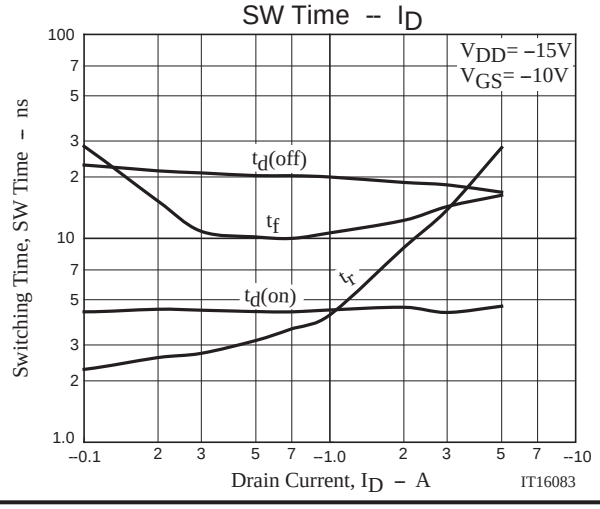


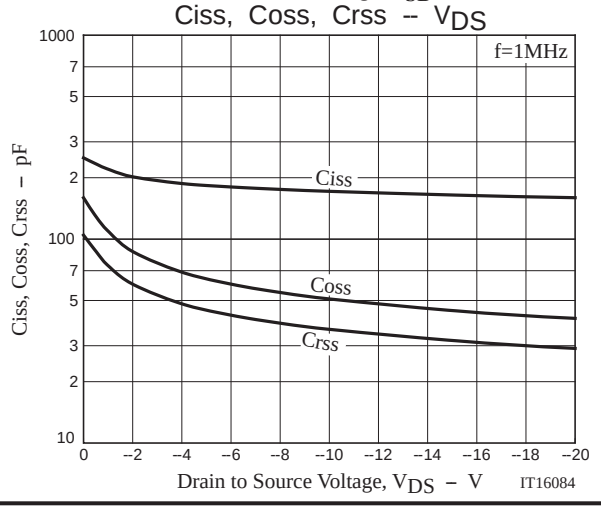


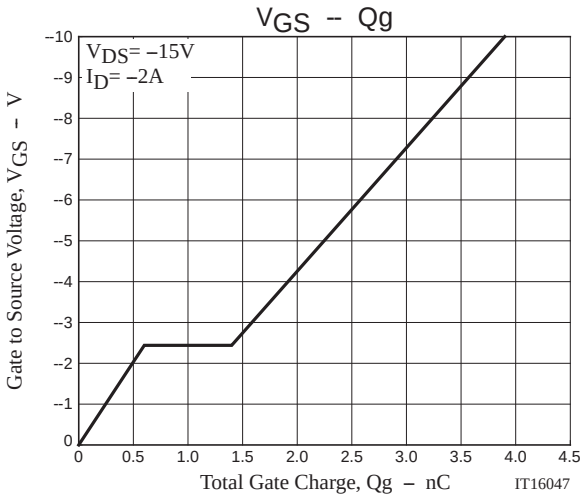


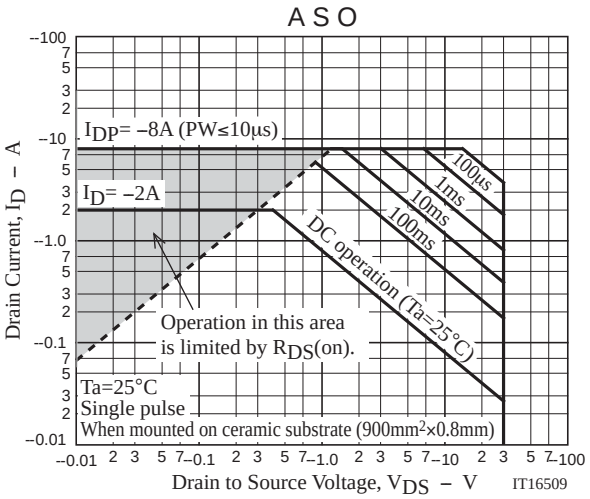


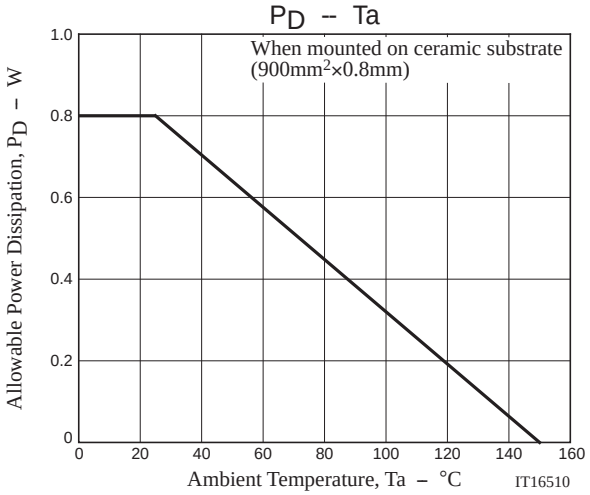






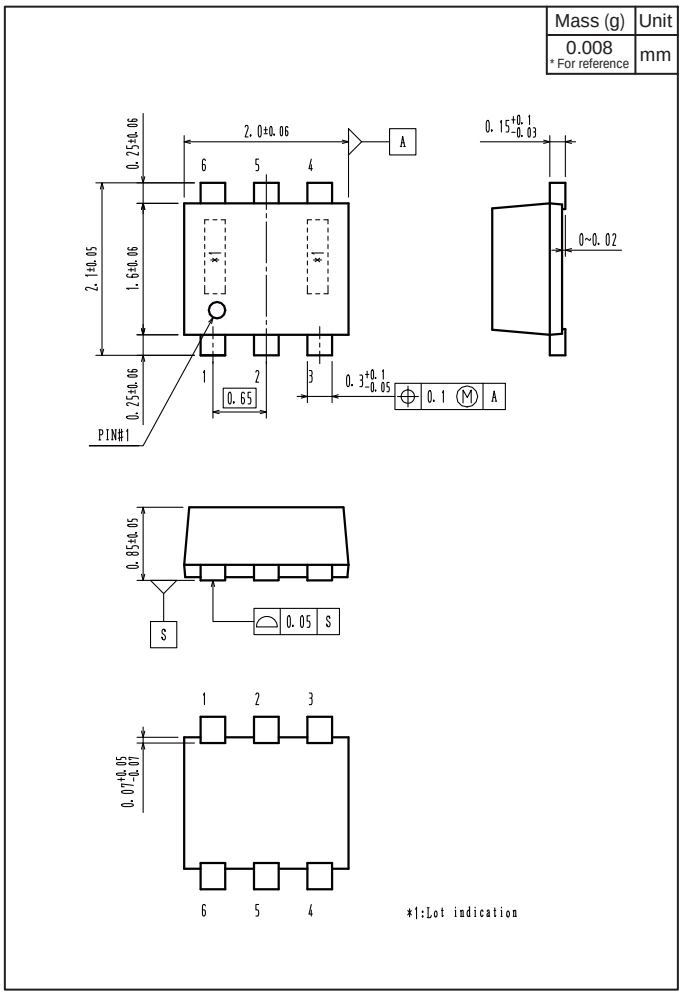




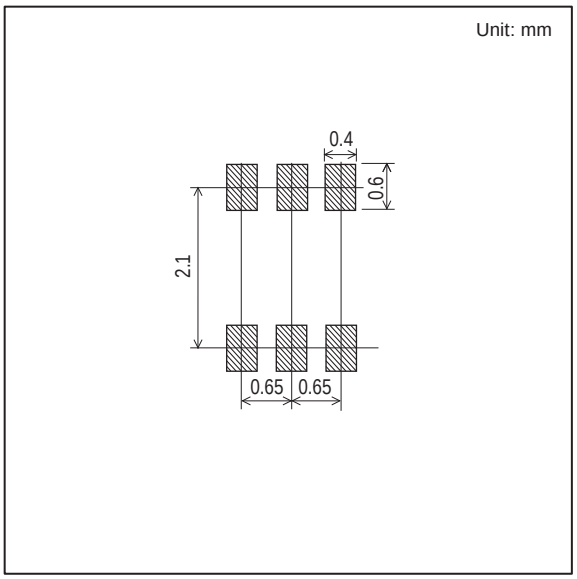


Outline Drawing

MCH6344-TL-H



Land Pattern Example



Note on usage : Since the MCH6344 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.