

TENTATIVE

### Features and Applications

- Low ON-state resistance.
- Very High Speed Switching.
- 2.5V drive.

### Absolute Maximum Ratings / Ta=25°C

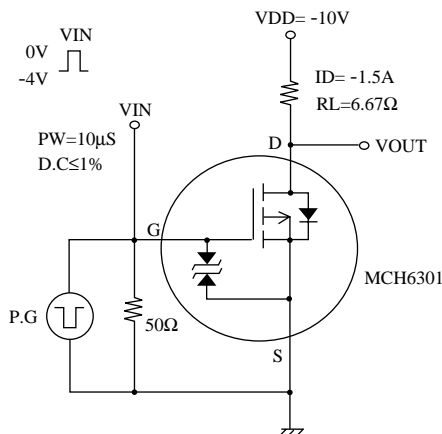
			unit
Drain to Source Voltage	V <sub>DSS</sub>	-20	V
Gate to Source Voltage	V <sub>GSS</sub>	±10	V
Drain Current(DC)	I <sub>D</sub>	-3.0	A
Drain Current(Pulse)	I <sub>DP</sub>	PW≤10μS, dutycycle≤1%	-12.0 A
Allowable power Dissipation	P <sub>D</sub>	Mounted on ceramic board(900mm <sup>2</sup> ×0.8mm)	1.5 W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

### Electrical Characteristics / Ta=25°C

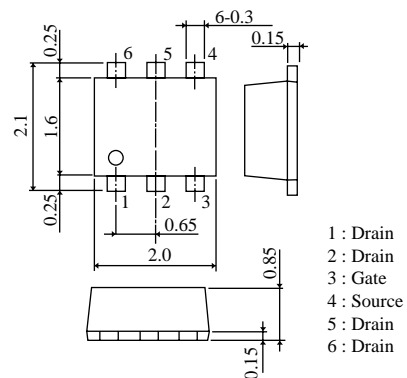
			min	typ	max	unit
Drain to Source Breakdown Voltage	V(BR)DSS	I <sub>D</sub> =-1mA, V <sub>GS</sub> =0	-20			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>D</sub> =-20V, V <sub>GS</sub> =0			-1	μA
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±8V, V <sub>D</sub> =0			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>D</sub> =-10V, I <sub>D</sub> =-1mA	-0.4		-1.4	V
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>D</sub> =-10V, I <sub>D</sub> =-1.5A	2.9	4.2		mS
Static Drain to Source on State Resistance	R <sub>DS(on)1</sub>	I <sub>D</sub> =-1.5A, V <sub>GS</sub> =-4V		90	115	mΩ
	R <sub>DS(on)2</sub>	I <sub>D</sub> =-0.7A, V <sub>GS</sub> =-2.5V		130	180	mΩ
Input Capacitance	C <sub>iss</sub>	V <sub>D</sub> =-10V, f=1MHz		500		pF
Output Capacitance	C <sub>oss</sub>	V <sub>D</sub> =-10V, f=1MHz		145		pF
Rverse Transfer Cpacitance	C <sub>rss</sub>	V <sub>D</sub> =-10V, f=1MHz		100		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See Specified Test Circuit.		12		ns
Rise Time	t <sub>r</sub>		42	ns		
Turn-oFF Delay Time	t <sub>d(off)</sub>		39	ns		
Fall Time	t <sub>f</sub>		57	ns		
Total Gate Charge	Q <sub>g</sub>			12.5		nC
Gate Source Charge	Q <sub>gs</sub>	V <sub>D</sub> =-10V, V <sub>GS</sub> =-10V, I <sub>D</sub> =-3.0A		1.2		nC
Gate Drain Charge	Q <sub>gd</sub>			1.8		nC
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = -3.0A, V <sub>GS</sub> = 0	-0.83		-1.5	V

Marking : JA

### Switching Time Test Circuit



### Case Outline MCH6(unit:mm)



Specifications and information herein are subject to change without notice.

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