

TENTATIVE

### Features and Applications

- Low ON-state resistance.
- Low Qg.

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

			unit
Drain to Source Voltage	V <sub>DSS</sub>	900	V
Gate to Source Voltage	V <sub>GSS</sub>	±30	V
Drain Current(DC)	I <sub>D</sub> *	5	A
Drain Current(Pulse)	I <sub>DP</sub>	15	A
Allowable power Dissipation	P <sub>D</sub> (TC=25°C)	35	W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to ±150	°C

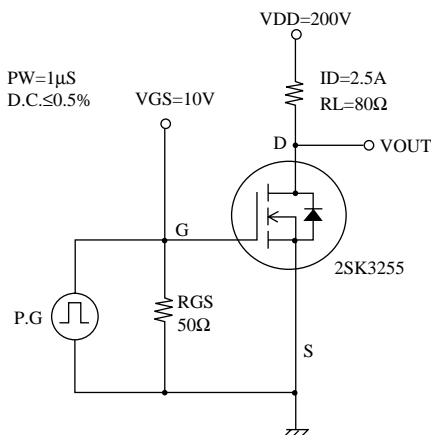
\*) : Chip Performance Shown

### Electrical Characteristics / Ta=25°C

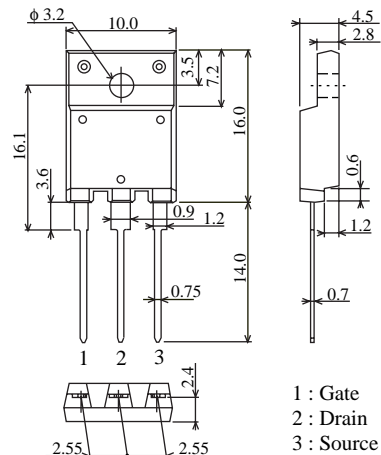
			min	typ	max	unit
Drain to Source Breakdown Voltage	V(BR) <sub>DSS</sub>	I <sub>D</sub> =1mA , V <sub>GS</sub> =0	900			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>D</sub> =900V , V <sub>GS</sub> =0			250	μA
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±30V , V <sub>D</sub> =0			±100	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>D</sub> =10V , I <sub>D</sub> =1mA	2.5		3.5	V
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>D</sub> =10V , I <sub>D</sub> =2.5A	2.4	4.0		S
Static Drain to Source On State Resistance	R <sub>DS(on)</sub>	I <sub>D</sub> =2.5A , V <sub>GS</sub> =10V		2.1	2.8	Ω
Input Capacitance	C <sub>iss</sub>	V <sub>D</sub> =20V , f=1MHz		1100		pF
Output Capacitance	C <sub>oss</sub>	V <sub>D</sub> =20V , f=1MHz		115		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>D</sub> =20V , f=1MHz		28		pF
Total Gate Charge	Q <sub>g</sub>	V <sub>D</sub> =200V , I <sub>D</sub> =2.5A V <sub>GS</sub> =20V		44		nC
Turn-ON Delay Time	t <sub>d(on)</sub>	See Specified Test Circuit		21		ns
Rise Time	t <sub>r</sub>		43		ns	
Turn-OFF Delay Time	t <sub>d(off)</sub>		160		ns	
Fall Time	t <sub>f</sub>		47		ns	
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> =2.5A , V <sub>GS</sub> =0			1.5	V

(Note) Be careful in handling the 2SK3255 because it has no protection diode between gate and source.

### Switching Time Test Circuit



### Package Dimensions TO-220FI(LS)(unit:mm)



Specifications and information herein are subject to change without notice.