2SK3245

N- Channel MOS Silicon FET
Very High-Speed Switching Applications

TENTATIVE

Features and Applications

- Low ON-state resistance.
- Low Qg.

Absolute Maximum Ratings / Ta=25°C

				unit
Drain to Source Voltage	VDSS		600	V
Gate to Source Voltage	VGSS		±30	V
Drain Current(DC)	ID*		8	A
Drain Current(Pulse)	IDP		32	A
Allowable power Dissipation	PD	(TC=25°C)	40	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		−55 to ±150	°C

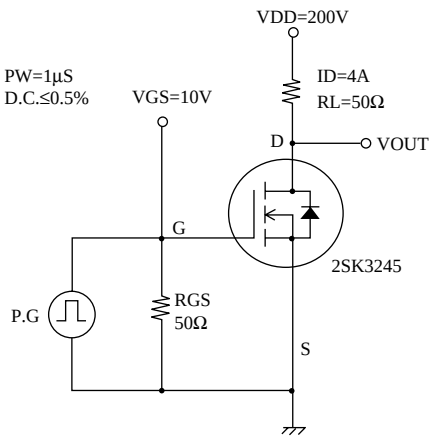
*) : Chip Performance Shown

Electrical Characteristics / Ta=25°C

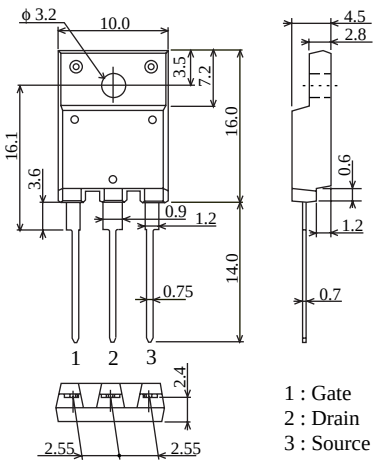
			min	typ	max	unit
Drain to Source Breakdown Voltage	V(BR)DSS	ID=1mA , VGS=0	600			V
Zero Gate Voltage Drain Current	IDSS	VDS=600V , VGS=0			250	μA
Gate to Source Leakage Current	IGSS	VGS=±30V , VDS=0			±100	nA
Cutoff Voltage	VGS(off)	VDS=10V , ID=1mA	2.5		3.5	V
Forward Transfer Admittance	| yfs |	VDS=10V , ID=4A	2.4	5.5		S
Static Drain to Source On State Resistance	RDS(on)	ID=4A , VGS=10V		0.9	1.2	Ω
Input Capacitance	Ciss	VDS=20V , f=1MHz		1050		pF
Output Capacitance	Coss	VDS=20V , f=1MHz		170		pF
Reverse Transfer Capacitance	Crss	VDS=20V , f=1MHz		58		pF
Total Gate Charge	Qg	VDS=200V , ID=4A, VGS=20V		40		nC
Turn-ON Delay Time	td(on)	See Specified Test Circuit		18		ns
Rise Time	tr			40		ns
Turn-OFF Delay Time	td(off)			142		ns
Fall Time	tf			53		ns
Diode Forward Voltage	VSD	IS=4A , VGS = 0			1.5	V

(Note) Be careful in handling the2SK3245 because it has no protection diode between gate and source.

Switching Time Test Circuit



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



1 : Gate
2 : Drain
3 : Source

Specifications and information herin are subject to change without notice.

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