

TENTATIVE

### Features and Applications

- Low ON-state resistance.
- Very high - speed switching.
- 4V drive.

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

			unit	
Drain to Source Voltage	VDSS	30	V	
Gate to Source Voltage	VGSS	±20	V	
Drain Current (DC)	ID	45	A	
Drain Current (Pulse)	IDP	PW≤10μs, duty cycle≤1%	80	A
Allowable power Dissipation	PD	1.65	W	
		Tc=25°C	40	W
Channel Temperature	Tch	150	°C	
Storage Temperature	Tstg	-55 to +150	°C	

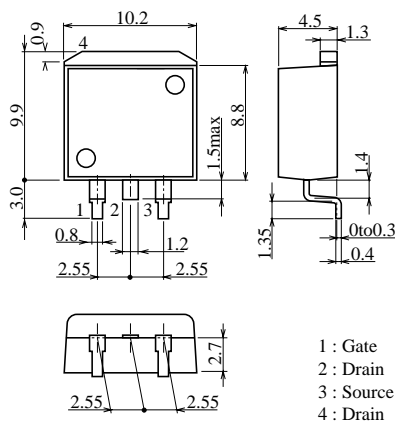
### Electrical Characteristics / Ta=25°C

			min	typ	max	unit
Drain to Source Breakdown Voltage	V(BR)DSS	ID=1mA, VGS=0	30			V
Zero Gate Voltage Drain Current	IDSS	VDS=30V, VGS=0			1	μA
Gate to Source Leakage Current	IGSS	VGS=±16V, VDS=0			±10	μA
Cutoff Voltage	VGS(off)	VDS=10V, ID=1mA	1.0		2.4	V
Forward Transfer Admittance	yfs	VDS=10V, ID=20A	19	27		S
Static Drain to Source on State Resistance	RDS(on)	ID=20A, VGS=10V		11	15	mΩ
	RDS(on)	ID=10A, VGS=4.5V		15	21	mΩ
Input Capacitance	Ciss	VDS=10V, f=1MHz		1400		pF
Output Capacitance	Coss	VDS=10V, f=1MHz		420		pF
Reverse Transfer Capacitance	Crss	VDS=10V, f=1MHz		210		pF
Turn-ON Delay Time	td(on)	See specified Test Circuit		14		ns
Rise Time	tr			530		ns
Turn-off Delay Time	td(off)			100		ns
Fall Time	tf			150		ns
Total Gate Charge	Qg		VDS=10V, VGS=10V, ID=20A		28	
Gate Source Charge	Qgs			4.6		nC
Gate Drain Charge	Qgd			5		nC
Diode Forward Voltage	VSD	IS=45A, VGS=0	1.0	1.2		V

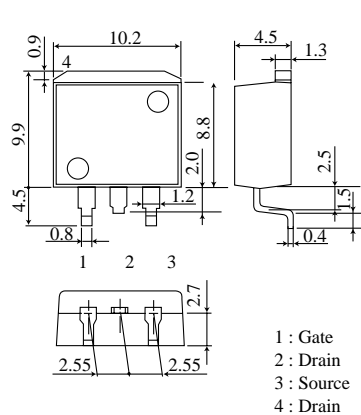
Marking : K3352

### Package Dimensions

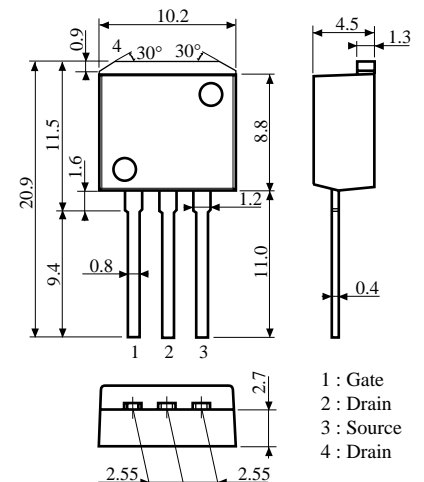
SMP-FD (unit : mm)



SMP-FA (unit : mm)



SMP(unit:mm)



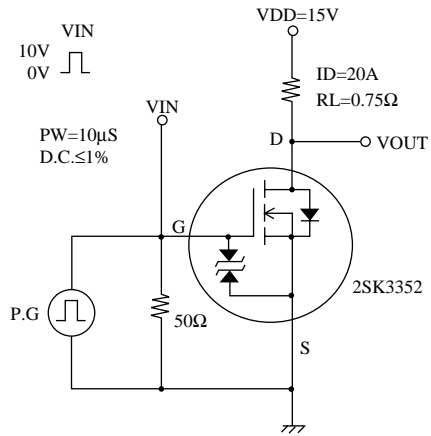
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Switching Time Test Circuit





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