

2SK1311



2062

LD (Low Drive) Series $V_{DS}=60V$

N Channel Power MOSFET

©3153A

Features

- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.

Absolute Maximum Ratings at $T_a=25^\circ C$

			unit
Drain to Source Voltage	V_{DS}	60	V
Gate to Source Voltage	V_{GS}	± 20	V
Drain Current(DC)	I_D	2	A
Drain Current(Pulse)	I_{DP}	4	A
Allowable Power Dissipation	P_D	3.5	W
		1.5	W
	$T_c=25^\circ C$		
	Mounted on ceramic board		
	(250mm ² × 0.8mm)		
Channel Temperature	T_{ch}	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

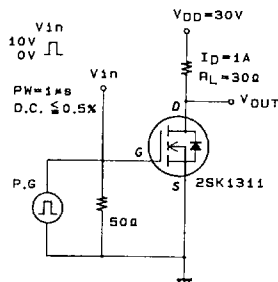
Electrical Characteristics at $T_a=25^\circ C$

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DS}$	$I_D=1mA, V_{GS}=0$	60			V
Zero Gate Voltage	I_{DSS}	$V_{DS}=60V, V_{GS}=0$			100	μA
Drain Current						
Gate to Source Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$			± 100	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10V, I_D=1mA$	0.8		2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=1A$	1.0	1.7		S
Static Drain to Source	$R_{DS(on)}$	$I_D=10A, V_{GS}=10V$	0.35	0.45		Ω
on State Resistance						
Input Capacitance	C_{iss}	$V_{DS}=20V, f=1MHz$		160		pF
Output Capacitance	C_{oss}	$V_{DS}=20V, f=1MHz$		60		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=20V, f=1MHz$		12		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		6		ns
Rise Time	t_r	"		10		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		36		ns
Fall Time	t_f	"		20		ns
Diode Forward Voltage	V_{SD}	$I_S=2A, V_{GS}=0$	1.0	1.2		V

Marking: KB

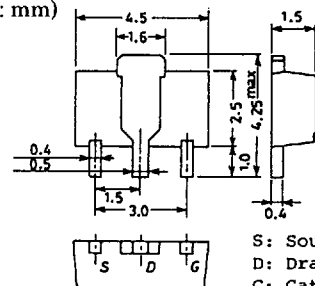
(Note) Be careful in handling the 2SK1311 because it has no protection diode between gate and source.

Switching Time Test Circuit



Package Dimensions 2062

(unit: mm)



S: Source
D: Drain
G: Gate

SANYO: PCP

41293TH(KOTO)/6200MO/9219MO/6279MO, TS X-6380 No.3153-1/3

