

2SK2373

Silicon N-Channel MOS FET

HITACHI

ADE-208-268
1st. Edition

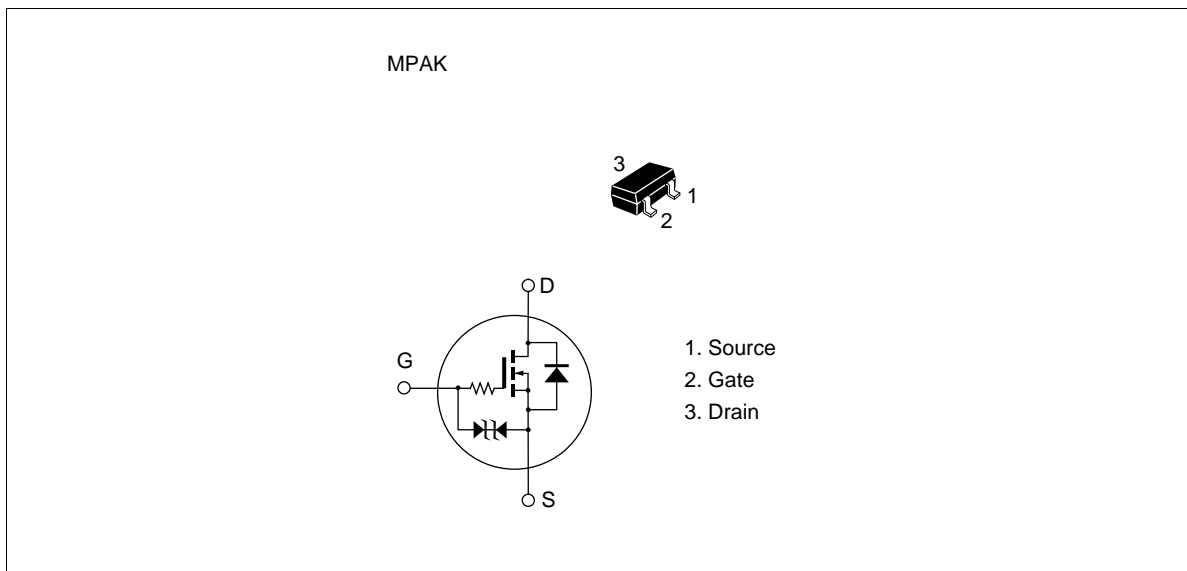
Application

Low frequency power switching

Features

- Low on-resistance
- Small package
- Low drive current
- 4 V gate drive device can be driven from 5 V source.
- Suitable for low signal load switch

Outline



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Absolute Maximum Ratings (Ta = 25°C)

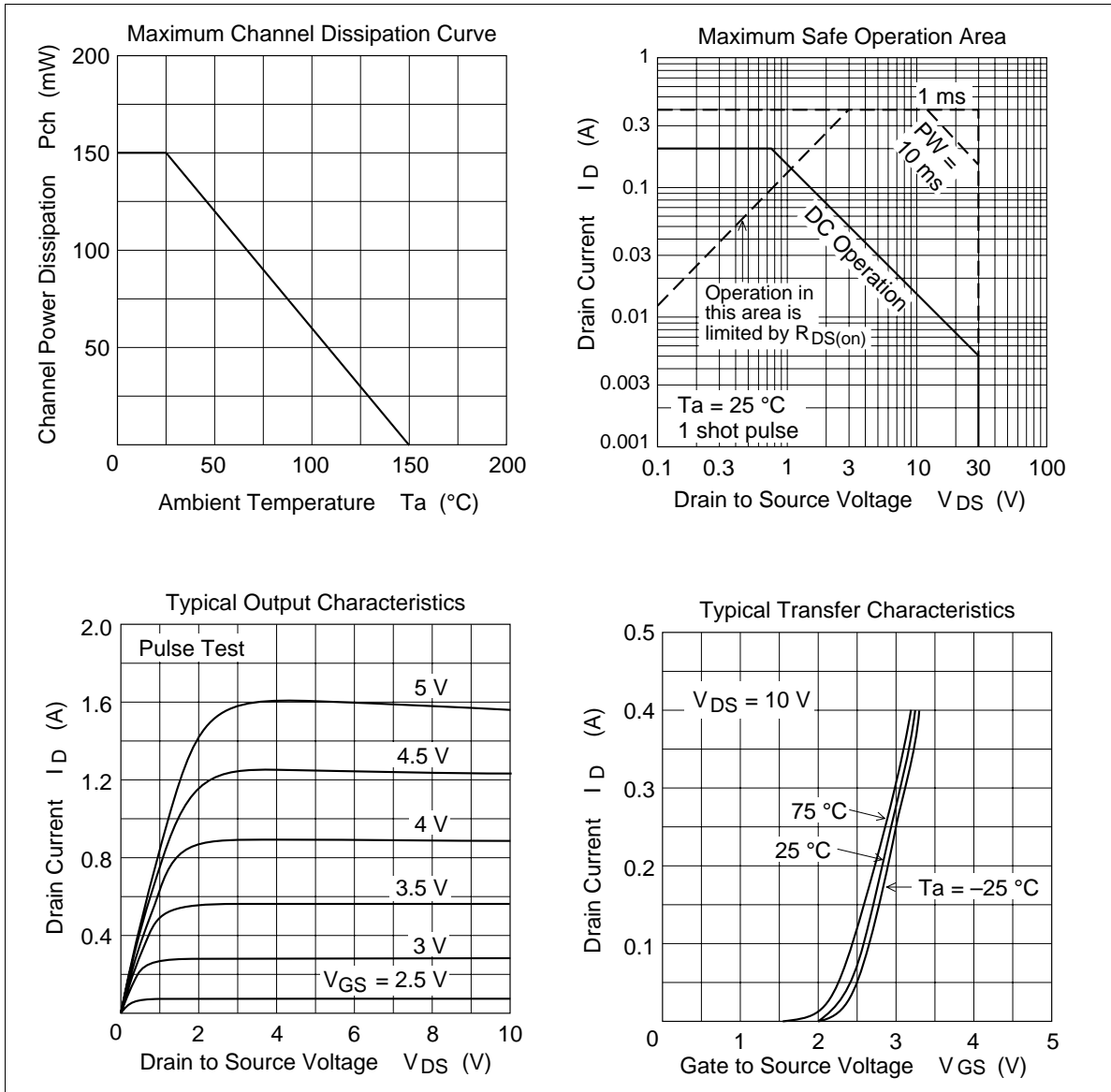
Item	Symbol	Ratings	Unit
Drain to source voltage	V_{DSS}	30	V
Gate to source voltage	V_{GSS}	±20	V
Drain current	I_D	0.2	A
Drain peak current	$I_{D(pulse)}^{*1}$	0.4	A
Body to drain diode reverse drain current	I_{DR}	0.2	A
Channel dissipation	Pch*2	150	mW
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-55 to +150	°C

Notes 1. $PW \leq 100 \mu s$, duty cycle $\leq 10 \%$
 2. Marking is "ZE-".

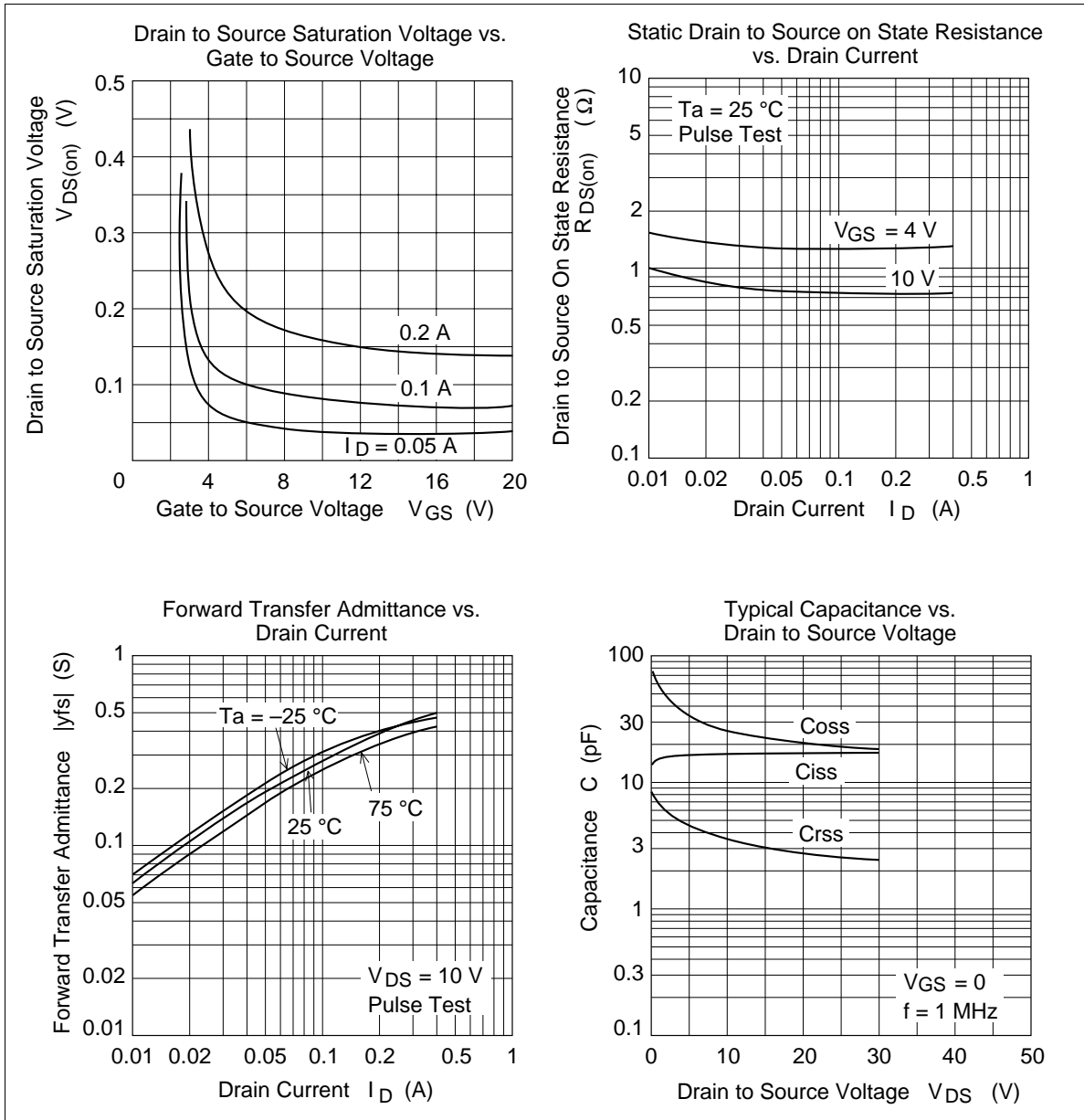
Electrical Characteristics (Ta = 25°C)

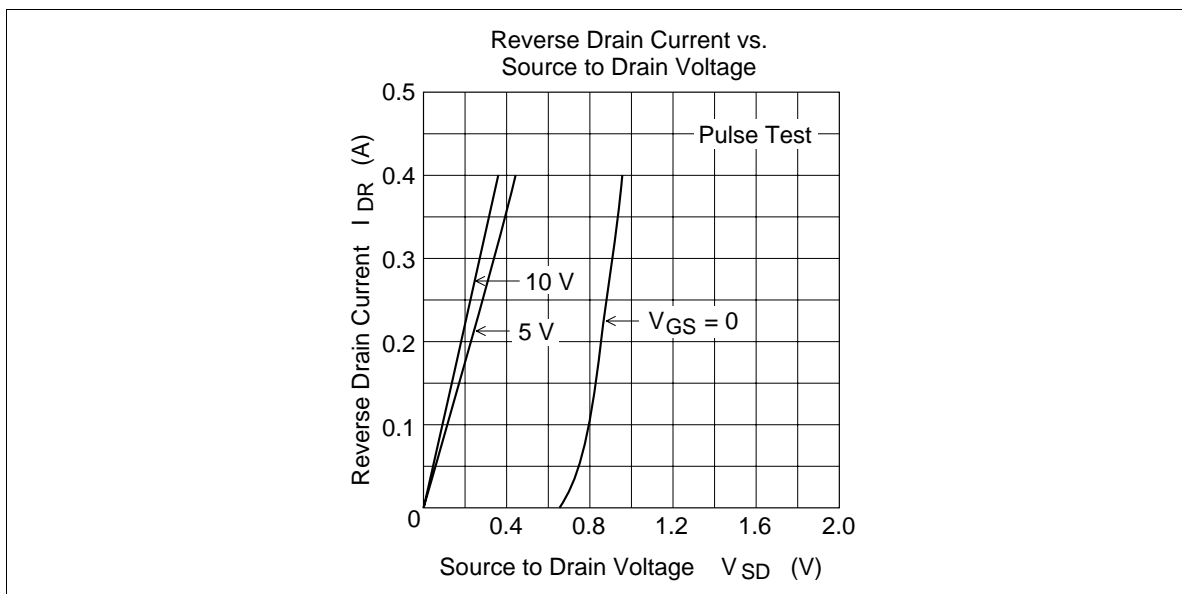
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Drain to source breakdown voltage	$V_{(BR)DSS}$	30	—	—	V	$I_D = 100 \mu A$, $V_{GS} = 0$
Gate to source breakdown voltage	$V_{(BR)GSS}$	±20	—	—	V	$I_G = \pm 100 \mu A$, $V_{DS} = 0$
Gate to source leak current	I_{GSS}	—	—	±2	μA	$V_{GS} = \pm 16 V$, $V_{DS} = 0$
Zero gate voltage drain current	I_{DSS}	—	—	1	μA	$V_{DS} = 30 V$, $V_{GS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	1.0	—	2.0	V	$I_D = 10 \mu A$, $V_{DS} = 5 V$
Static drain to source on state resistance	$R_{DS(on)}$	—	1.4	2.5	Ω	$I_D = 20 mA$ $V_{GS} = 4 V^{*1}$
		—	1.0	1.4	Ω	$I_D = 10 mA$ $V_{GS} = 10 V^{*1}$
Input capacitance	Ciss	—	17.8	—	pF	$V_{DS} = 10 V$
Output capacitance	Coss	—	25.4	—	pF	$V_{GS} = 0$
Reverse transfer capacitance	Crss	—	3.7	—	pF	f = 1 MHz
Turn-on delay time	$t_{d(on)}$	—	50	—	ns	$I_D = 0.1 A$
Rise time	t_r	—	125	—	ns	$V_{GS} = 10 V$
Turn-off delay time	$t_{d(off)}$	—	660	—	ns	$R_L = 100 \Omega$
Fall time	t_f	—	400	—	ns	PW = 2 μs

Note 1. Pulse Test



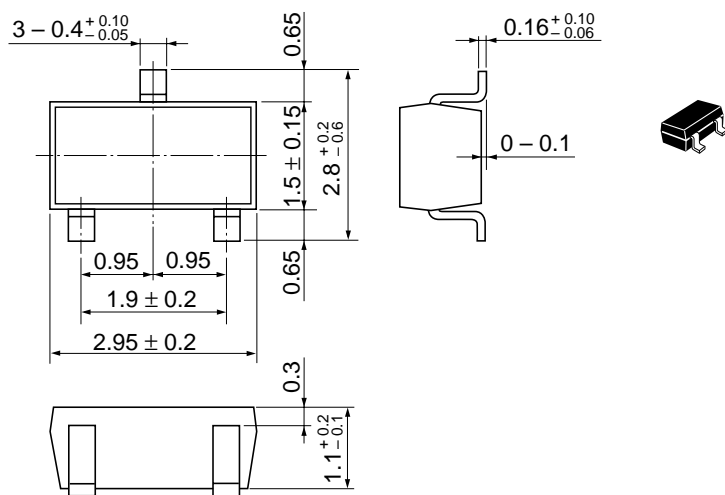
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Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.011 g

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