N-Channel Silicon MOSFET



2SK2260

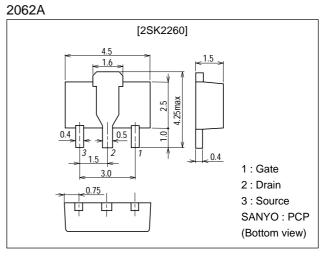
Ultrahigh-Speed Switching Applications

Features

- \cdot Low ON resistance.
- · Ultrahigh-speed switching.
- · Low-voltage drive.

Package Dimensions

unit:mm



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		150	V
Gate-to-Source Voltage	V _{GSS}		±20	V
Drain Current (DC)	۱ _D		1.2	A
Drain Current (Pulse)	I _{DP}	PW≤10µs, duty cycle≤1%	4.8	A
Allowable Power Dissipation	D-	Tc=25°C	3.5	W
	PD	Mounted on ceramic board (250mm ² ×0.8mm)	1.5	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR)DSS	ID=1mA, VGS=0	150			V
Zero-Gate Voltage Drain Current	IDSS	V _{DS} =150V, V _{GS} =0			100	μA
Gate-to-Source Leakage Current	IGSS	V _{GS} =±18V, V _{DS} =0			±10	μA
Cutoff Voltage	VGS(off)	V _{DS} =10V, I _D = 1mA	1.5		2.5	V
Forward Transfer Admittance	yfs	V _{DS} =10V, I _D =600mA	0.8	1.1		S
Static Drain-to-Source ON-State Resistance	R _{DS(on)}	I _D =600mA, V _{GS} =10V		1.6	2.2	Ω
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Marking : KO

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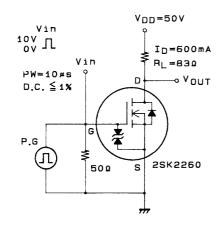
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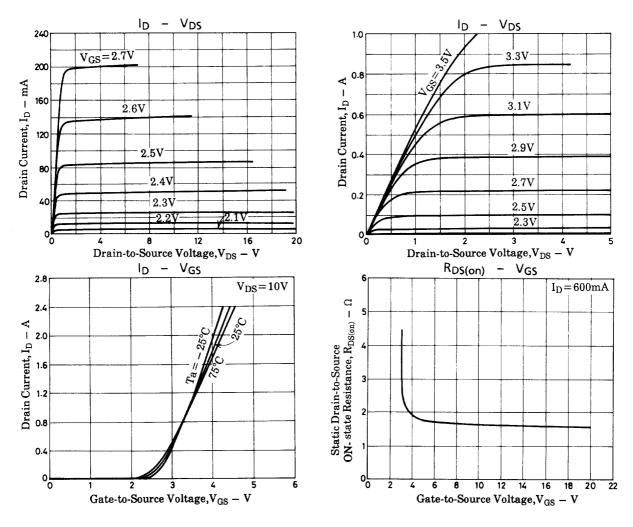
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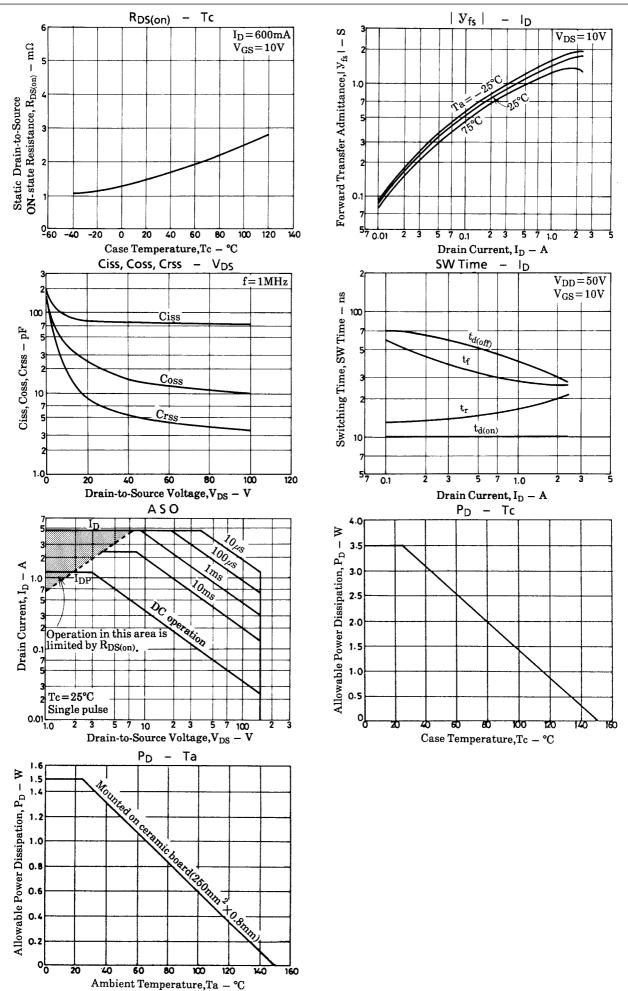
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Input Capacitance	Ciss	V _{DS} =20V, f=1MHz		80		pF
Output Capacitance	Coss	V _{DS} =20V, f=1MHz		25		pF
Reverse Transfer Capacitance	Crss	V _{DS} =20V, f=1MHz		8.5		pF
Turn-ON Delay Time	^t d(on)	See specified Test Circuit		10		ns
Rise Time	tr	See specified Test Circuit		15		ns
Turn-OFF Delay Time	td(off)	See specified Test Circuit		50		ns
Fall Time	t _f	See specified Test Circuit		30		ns
Diode Forward Voltage	V _{SD}	I _S =1.2A, V _{GS} =0		1.0		V

Switching Time Test Circuit







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