Ordering number: ENN4753

N-Channel Silicon MOSFET



2SK2260

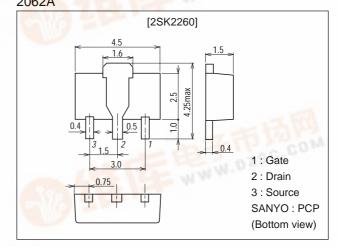
# **Ultrahigh-Speed Switching Applications**

### **Features**

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

## **Package Dimensions**

unit:mm 2062A



# **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSS</sub>		150	V
Gate-to-Source Voltage	V <sub>GSS</sub>		±20	V
Drain Current (DC)	I <sub>D</sub>	100	1.2	Α
Drain Current (Pulse)	I <sub>DP</sub>	PW≤10μs, duty cycle≤1%	4.8	Α
Allowable Power Dissipation	D-	Tc=25°C	3.5	W
	PD	Mounted on ceramic board (250mm <sup>2</sup> ×0.8mm)	1.5	W
Channel Temperature	Tch	THE SERVICE PROPERTY.	150	°C
Storage Temperature	Tstg	CHO MINIS	-55 to +150	°C

# Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Drain-to-Source Breakdown Voltage	V(BR)DSS	I <sub>D</sub> =1mA, V <sub>GS</sub> =0	150			V
Zero-Gate Voltage Drain Current	IDSS	V <sub>DS</sub> =150V, V <sub>GS</sub> =0			100	μΑ
Gate-to-Source Leakage Current	IGSS	V <sub>GS</sub> =±18V, V <sub>DS</sub> =0			±10	μΑ
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> = 1mA	1.5	- 11	2.5	V
Forward Transfer Admittance	yfs	V <sub>DS</sub> =10V, I <sub>D</sub> =600mA	0.8	1,1	20.	S
Static Drain-to-Source ON-State Resistance	RDS(on)	In=600mA, VGS=10V	-11 W	1.6	2.2	Ω

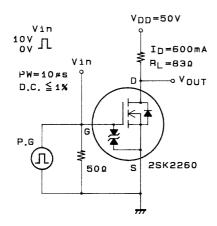
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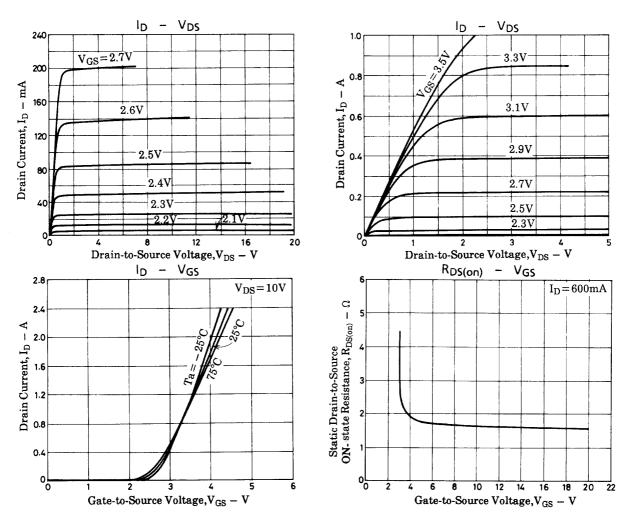
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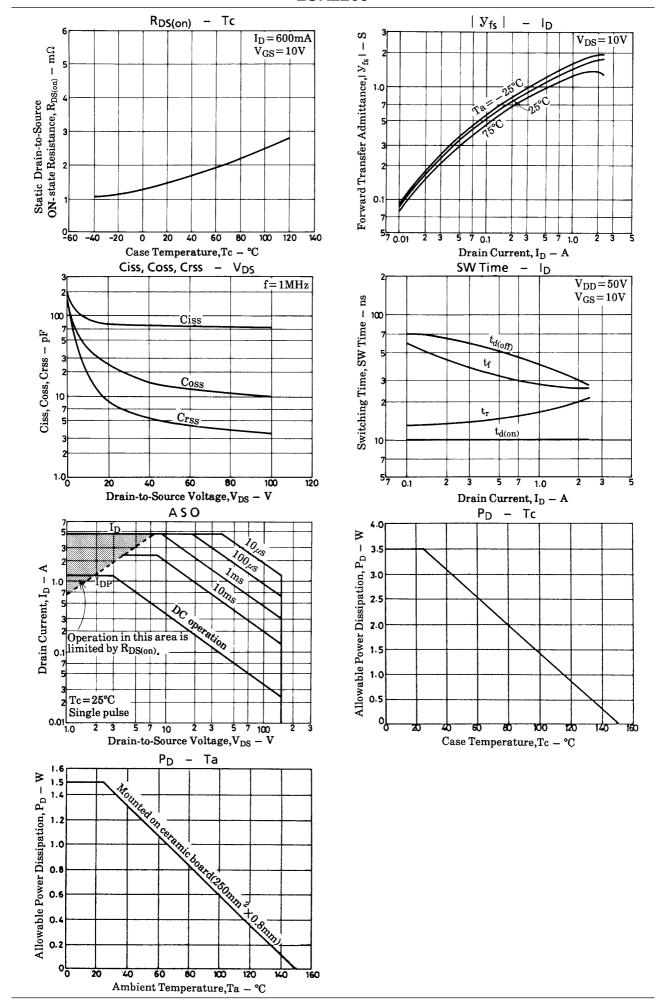
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Uill
Input Capacitance	Ciss	V <sub>DS</sub> =20V, f=1MHz		80		pF
Output Capacitance	Coss	V <sub>DS</sub> =20V, f=1MHz		25		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> =20V, f=1MHz	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

## **Switching Time Test Circuit**







#### 2SK2260

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