3SK248



# Muting/Switching Applications

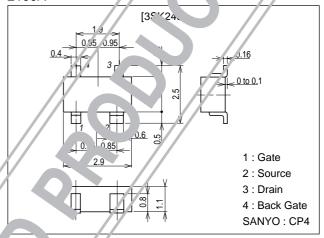
### **Features**

- · MOSFET with a back gate terminal.
- · Enhancement type.
- · Small ON resistance.
- · Small-sized package permitting 3SK248-applied sets to be made smaller and slimmer.

# **Package Dimensions**

unit:mm

2100A



## **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSS</sub>		10	V
Gate-to-Source Voltage	Váss		±10	V
Drain Current (DC)	1/6		100	mA
Allowable Power Dissipation	P <sub>D</sub>		200	mW
Channel Temperature	Tch	. //	125	°C
Storage Temperature	Tstq		-55 to +125	°C

## Electrical Characteristics $\partial_x Ta = 25$

Parameter	Symbo.	Conditions	Ratings			Unit
			min	typ	max	Oill
Drain-to-Source Breakdown Voltage	SS	I <sub>D</sub> -10μA, V <sub>GS</sub> =0V	10			V
Gate-to-Source Breakdown Vultr.ge	VGSS	'G= ±10μA, V <sub>DS</sub> =0V	±10			V
Zero-Gate Voltage Drain Currant	DSS	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V			1	μΑ
Gate-to-Source Leakage Cyarrent	IGSS	$V_{GS}=\pm 8V$ , $V_{DS}=0V$		±0.01	±50	nA
Cutoff Voltage	V <sub>G</sub> S <sub>(Ofi)</sub>	V <sub>DS</sub> =5V, I <sub>D</sub> =100μA	0.3		1.5	V
Forward Transfer Admittance	! yfs	V <sub>DS</sub> =5V, I <sub>D</sub> =50mA, f=1kHz		80		mS
Input Capacitance	Ciss	$V_{DS}$ =5V, $V_{GS}$ =0V, f=1MHz		50		pF
Output Capacitance	Coss	$V_{DS}$ =5V, $V_{GS}$ =0V, f=1MHz		10		pF
Reverse Transier Capacita.	Crss	$V_{DS}$ =5V, $V_{GS}$ =0V, f=1MHz		5		pF

Marking 'N'

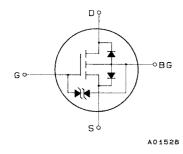
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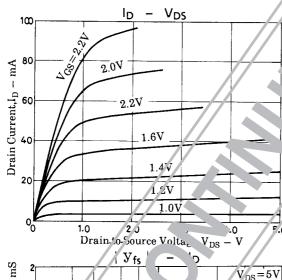
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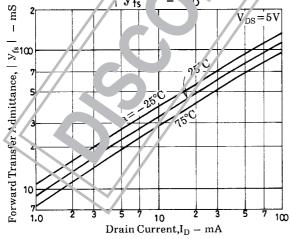
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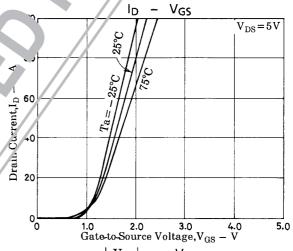
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Static Drain-to-Source ON-State Resistance	R <sub>DS(on)</sub> 1	V <sub>GS</sub> =5V, I <sub>D</sub> =50mA		5	7	Ω
	R <sub>DS(on)</sub> 2	V <sub>GS</sub> =2.5V, I <sub>D</sub> =15mA		7	12	Ω

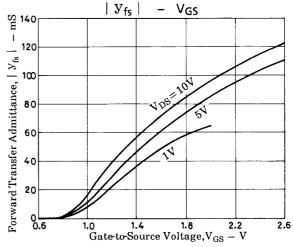
#### **Electrical Connection**

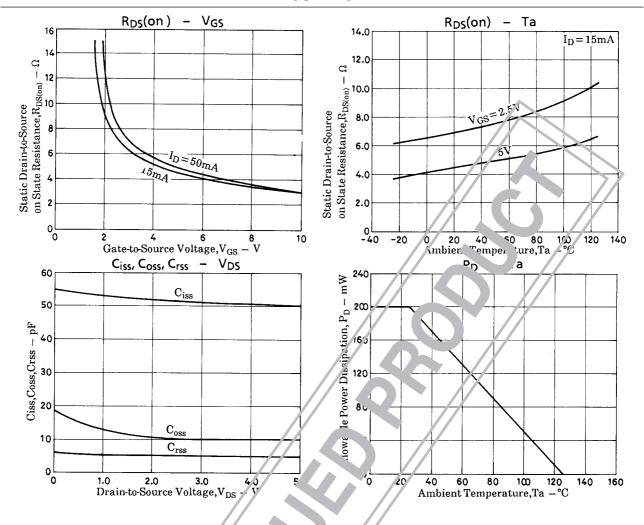












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