Silicon MOS FETs (Small Signal)

Panasonic

2SK0664 (2SK664)

Silicon N-Channel MOS FET

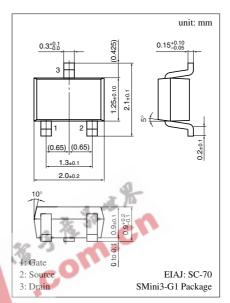
For switching

Features

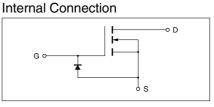
- High-speed switching
- S-mini type package, allowing downsizing of the sets and automatic insertion through the tape/magazine packing.

■ Absolute Maximum Ratings (Ta = 25°C)

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Parameter	Symbol	Ratings	Unit				
Drain to Source breakdown voltage	V _{DSS}	50	V				
Gate to Source voltage	V _{GSO}	8	V				
Drain current	ID	100	mA	Ν.			
Max drain current	I _{DP}	200	mA				
Allowable power dissipation	P _D	150	mW				
Channel temperature	T _{ch}	150	°C				
Storage temperature	T _{stg}	-55 to +150	°C				



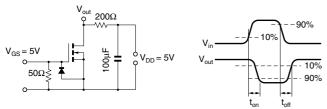
Marking Symbol: 3N



■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I _{DSS}	$V_{DS} = 10V, V_{GS} = 0$			10	μΑ
Gate to Source leakage current	I _{GSS}	$V_{GS} = 8V, V_{DS} = 0$			50	μΑ
Drain to Source breakdown voltage	V _{DSS}	$I_{\rm D} = 100 \mu A, V_{\rm GS} = 0$	50			V
Gate threshold voltage	V _{th}	$I_D = 100 \mu A, V_{DS} = V_{GS}$	1.5		3.5	V
Drain to Source ON-resistance	R _{DS(on)}	$I_D = 20 \text{mA}, V_{GS} = 5 \text{V}$			50	Ω
Forward transfer admittance	Y _{fs}	$I_D = 20mA, V_{DS} = 5V, f = 1kHz$	20			mS
Input capacitance (Common Source)	C _{iss}				15	pF
Output capacitance (Common Source)	Coss	$V_{DS} = 5V, V_{GS} = 0, f = 1kHz$			5	pF
Reverse transfer capacitance (Common Source)	C _{rss}				1	pF
Turn-on time	ton*	$V_{DD} = 5V$, $V_{GS} = 0$ to 5V, $R_L = 200\Omega$		10		ns
Turn-off time	t _{off} *	$V_{DD} = 5V$, $V_{GS} = 5$ to $0V$, $R_L = 200\Omega$		20		ns

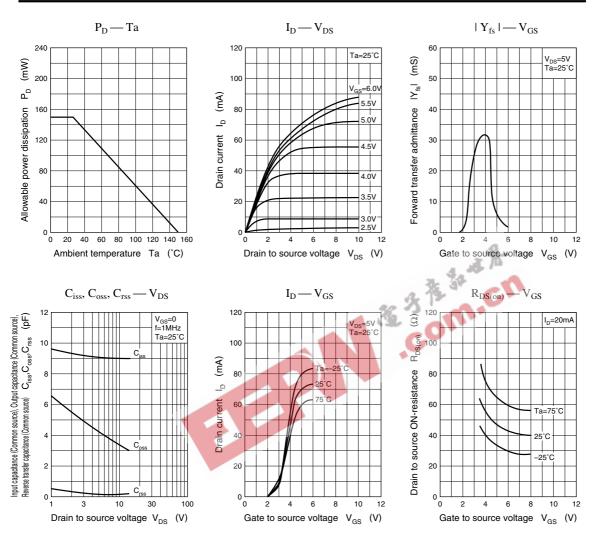
* ton, toff measurement circuit

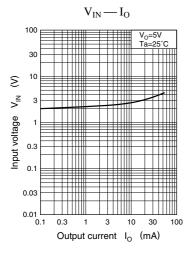


Note) The part number in the parenthesis shows conventional part number.

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2SK0664





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