2SK3539G

Silicon N-channel MOSFET

For switching

■ Features

- High-speed switching
- Wide frequency band
- Gate protection diode built-in

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Drain-source voltage	V_{DS}	50	V
Gate-source voltage (Drain open)	V _{GSO}	±7	V
Drain current	I_{D}	100	mA
Peak drain current	I_{DP}	200	mA
Power dissipation	P_{D}	150	mW
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

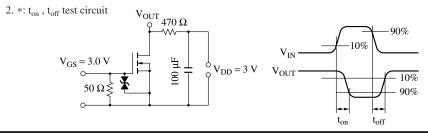
Package

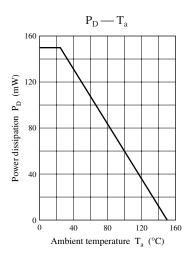
- Code
 - SMini3-F2
- Marking Symbol: 5F
- Pin Name
 - 1: Gate
 - 2: Source
 - 3: Drain

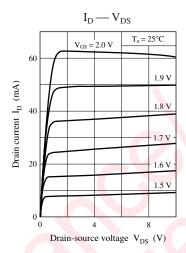
■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

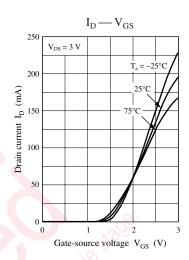
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Drain-source surrender voltage	V _{DSS}	$I_D = 10 \mu\text{A}, V_{GS} = 0$	50	9,0	0.,.	V
Drain-source cutoff current	I _{DSS}	$V_{DS} = 50 \text{ V}, V_{GS} = 0$	J.J.	· · · ic	1.0	μΑ
Gate-Source cutoff current	I_{GSS}	$V_{GS} = \pm 7 \text{ V}, V_{DS} = 0$	10,	80,	±5.0	μΑ
Gate threshold voltage	V_{th}	$I_D = 1.0 \mu\text{A}, V_{DS} = 3 \text{V}$	0.9	1.2	1.5	V
Drain-source ON resistance	R _{DS(on)}	$I_D = 10 \text{ mA}, V_{GS} = 2.5 \text{ V}$	7.6	8	15	Ω
		$I_D = 10 \text{ mA}, V_{GS} = 4.0 \text{ V}$		6	12	
Forward trancfer admitance	$ Y_{fs} $	$I_D = 10 \text{ mA}, V_{DS} = 3 \text{ V}, f = 1 \text{ kHz}$	20	60		mS
Short-circuit forward transfer	C_{iss}	$V_{DS} = 3 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$		12		pF
capacitance (Common source)		is lar				
Short-circuit output capacitance (Common source)	C _{oss}			7		pF
Reverse transfer capacitance (Common source)	C_{rss}	Se Will.		3		pF
Turn-on time *	t _{on}	$V_{DD} = 3 \text{ V}, V_{GS} = 0 \text{ V to } 3 \text{ V}, R_L = 470 \Omega$		200		ns
Turn-off time *	t _{off}	$V_{DD} = 3 \text{ V}, V_{GS} = 3 \text{ V to } 0 \text{ V}, R_{L} = 470 \Omega$		200		ns

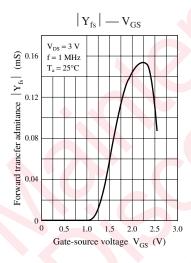
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

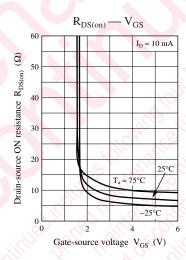


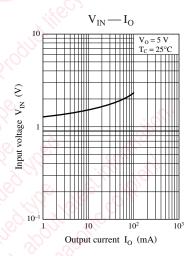




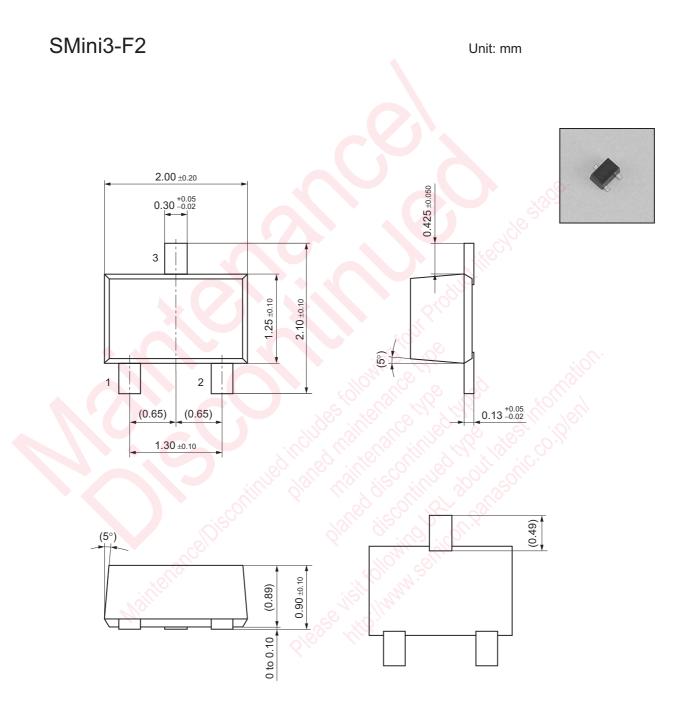








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