2SK3546G

Silicon N-Channel MOSFET

For switching

■ Features

- High-speed switching
- Wide frequency band

■ 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}	125	mW	
Channel temperature	T _{ch}	125	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

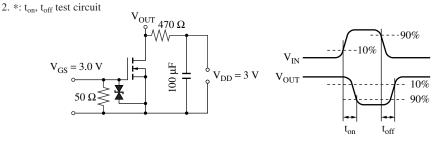
Package

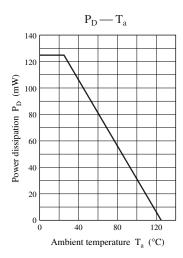
- Code
 - SSMini3-F3
- Marking Symbol: 5F
- Pin Name
 - 1: Gate
 - 2: Source
 - 3: Drain

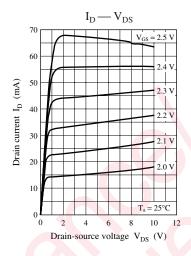
■ Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

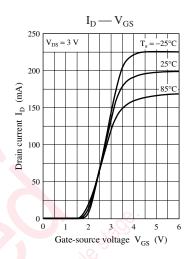
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Drain-source surrender voltage	V _{DSS}	$I_D = 10 \mu A, V_{GS} = 0$	50		40/	V
Drain-source cutoff current	I_{DSS}	$V_{DS} = 50 \text{ V}, V_{GS} = 0$.)	X	1.0	μΑ
Gate-source cutoff current	I_{GSS}	$V_{GS} = \pm 7 \text{ V}, V_{DS} = 0$	100	100	±5.0	μΑ
Gate 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)}	$I_D = 10 \text{ mA}, V_{GS} = 2.5 \text{ V}$	200	8	15	Ω
	dille	$I_D = 10 \text{ mA}, V_{GS} = 4.0 \text{ V}$),	6	12	
Forward transfer admittance	$ Y_{fs} $	$I_D = 10 \text{ mA}, V_{DS} = 3 \text{ V}, f = 1 \text{ kHz}$	20	60		mS
Short-circuit forward transfer capacitance (Common source)	C _{iss}	$V_{DS} = 3 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$		12		pF
Short-circuit output capacitance (Common source)	C _{oss}	$V_{DS} = 3 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$		7		pF
Reverse transfer capacitance (Common source)	C _{rss}	$V_{DS} = 3 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$		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

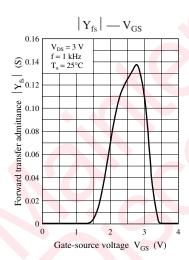
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

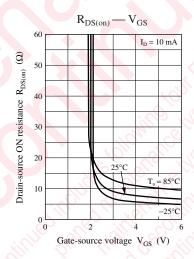


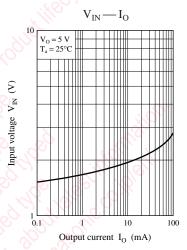




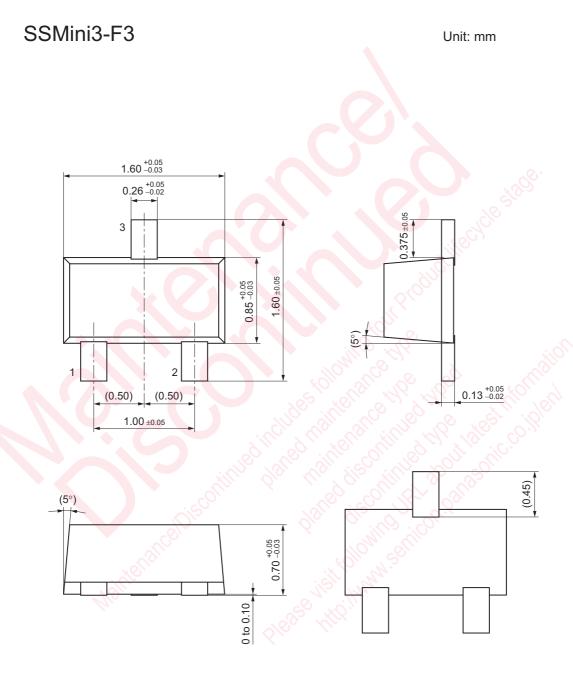








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