2SK0614 (2SK614)

Silicon N-Channel MOS FET

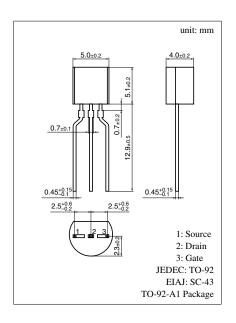
For switching

■ Features

- Low ON-resistance R_{DS(on)}
- High-speed switching
- Allowing to be driven directly by CMOS and TTL

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Ratings	Unit	
Drain to Source voltage	V _{DS}	80	V	
Gate to Source voltage	V _{GSO}	20	V	
Drain current	I_{D}	±0.5	A	
Max drain current	I_{DP}	±1	A	
Allowable power dissipation	P _D	750	mW	
Channel temperature	T _{ch}	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

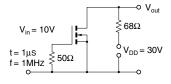


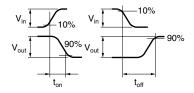
■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I _{DSS}	$V_{DS} = 60V, V_{GS} = 0$			10	μΑ
Gate to Source leakage current	I_{GSS}	$V_{GS} = 20V, V_{DS} = 0$			0.1	μΑ
Drain to Source breakdown voltage	V _{DSS}	$I_{DS} = 100 \mu A, V_{GS} = 0$	80			V
Gate threshold voltage	V _{th}	$I_D = 1 \text{mA}, V_{DS} = V_{GS}$	1.5		3.5	V
Drain to Source ON-resistance	R _{DS(on)} *1	$I_D = 0.5A, V_{GS} = 10V$		2	4	Ω
Forward transfer admittance	Y _{fs}	$I_D = 0.2A, V_{DS} = 15V, f = 1kHz$		300		mS
Input capacitance (Common Source)	C _{iss}			45		pF
Output capacitance (Common Source)	C _{oss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		30		pF
Reverse transfer capacitance (Common Source)	C _{rss}			8		pF
Turn-on time	t _{on} *2			15		ns
Turn-off time	t _{off} *2			20		ns

^{*1} Pulse measurement

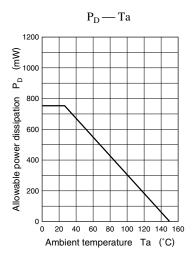
 $^{^{*2}}$ t_{on} , t_{off} measurement circuit

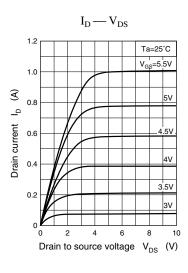


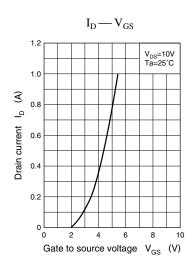


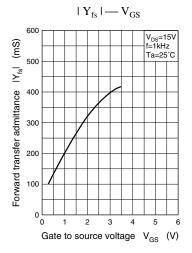
Note) The part number in the parenthesis shows conventional part number.

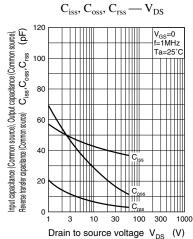
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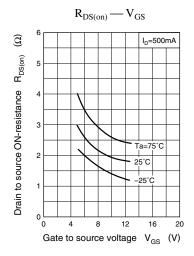


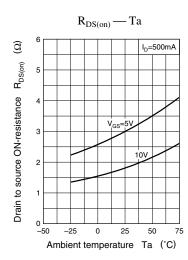












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