

# Field Effect Transistors

## ■ Silicon Junction FETs

Application	Package (No.)					Absolute Maximum Ratings (Ta=25 °C)		Electrical Characteristics (Ta=25 °C)			
	SS Mini Type (D1)	S Mini Type (D5)	Mini Type (D10)	New S Type (D39)	TO-92 (D49)	V <sub>DSS</sub> * V <sub>GSS</sub> (V)	I <sub>D</sub> (mA)	V <sub>DS</sub> (V)	NV * NF max. * typ. (mV)	gm min. * typ. (mS)	I <sub>SS</sub> max. (mA)
General-use low frequency amplifier	2SJ0385	2SJ364	2SK1103	2SK1104		* -65	20	—	—	2.5	6
			2SJ163	2SJ164		65	-20	—	—	2.5	-6
General-use		2SK662 2SK663	2SK198		2SK301	30	20	30	* 60	4	12
			2SK374			-55	30	10	* ※2.5dB	2.5	20
Capacitor microphone			2SK123	2SK65 <sup>1)</sup>		20	2	4.5	0.004	1.6	0.4
						12	2	4.5	0.004	0.5	0.8
Video camera pre-amp.			2SK1216			* -10	50	5	Ciss 4pF	20	14
Infrared sensor	△2SK2380		2SK1842			V <sub>GDO</sub> -40	1	10	Ciss * 1pF	—	0.2

△Preliminary 1) S Type Package

## ■ Silicon MOS FETs

### ● For High Frequency

Application	Type No.	Absolute Maximum Ratings (Ta=25 °C)			Electrical Characteristics (Ta=25 °C)							Package	
		V <sub>DS</sub> (V)	V <sub>G1S</sub> V <sub>G2S</sub> (V)	P <sub>D</sub> (mW)	PG typ. (dB)	NF typ. (dB)	PG, NF Conditions				No.		
							V <sub>DS</sub> (V)	V <sub>G2S</sub> (V)	I <sub>D</sub> (mA)	f (GHz)			
VHF RF Amp.	3SK202	15	±8	250	>25	<4.5	8	3	8	0.05	Cross Pack	D36	
	3SK144	15	±8	150	23	<2.0	8	8	3	0.2	Mini Type (4 pins)	D11(a)	
	3SK219	15	±8	150	21.5	<2.5	8	3	8	0.2	Mini Type (4 pins)	D11(a)	
	3SK268	15	±8	150	20	<3.0	8	3	8	0.2	S Mini Type (4 pins)	D6	
	△3SK286	15	±8	150	23	<2.5	8	3	8	0.2	Mini Type (4 pins)	D11(a)	
UHF RF Amp.	3SK143	15	±8	200	15	<5.0	8	3	8	0.8	Mini Type (4 pins)	D11(a)	
	△3SK285	13	±8	150	18.5	<3.0	6	4	8	0.8	Mini Type (4 pins)	D11(a)	
VHF, CATV RF Amp.	3SK139	15	±8	150	22	<3.2	8	3	8	0.05	Mini Type (4 pins)	D11(a)	
	3SK192	15	±8	150	17	<4.5	8	3	8	0.5	Mini Type (4 pins)	D11(a)	
	3SK227	15	±8	150	20	2.7	6	4	8	0.8	Mini Type (4 pins)	D11(a)	
	3SK269	15	±8	150	18.5	2.2	6	4	8	0.8	S Mini Type (4 pins)	D6	
	3SK270	15	±8	150	15.5	2.8	6	4	8	0.5	S Mini Type (4 pins)	D6	
	3SK271	15	±8	150	20.5	2.5	6	4	8	0.8	S Mini Type (4 pins)	D6	
VHF Mixer	3SK169	15	±8	150	Ciss 4.5pF	Coss 1.7pF	10	-5	10	0.1	Mini Type (4 pins)	D11(a)	

△Preliminary

### ● For Small Signal

Application	Structure	Type No.	Absolute Maximum Ratings (Ta=25 °C)				Electrical Characteristics (Ta=25 °C)				Package	
			V <sub>DS</sub> * V <sub>DSS</sub> (V)	V <sub>GS0</sub> (V)	I <sub>D</sub> (A)	P <sub>D</sub> (mW)	gm min. typ.* (mS)	R <sub>DS</sub> (on) typ. (Ω)	t <sub>on</sub> max. typ.* (ns)	t <sub>off</sub> max. typ.* (ns)	No.	
Digital/ analog switching	Nch	2SK601	80	20	0.5	1000	* 300	2	* 15	* 20	Mini Power Type	D16
		2SK614	80	20	0.5	750	* 300	2	* 15	* 20	TO-92	D49
		2SK615	80	20	0.5	1000	* 300	2	* 15	* 20	M Type	D40
		2SK620	50	8	0.1	150	20	40	10	20	Mini Type (3 pins)	D10
		2SK655	50	8	0.1	200	20	40	10	20	New S Type	D39
		2SK656	50	8	0.1	200	20	40	1000	1000	New S Type	D39
		2SK657	50	8	0.1	400	20	40	10	20	M Type	D40
		2SK658	20	8	0.1	400	20	40	1000	1000	M Type	D40
		2SK664	50	8	0.1	150	20	40	10	20	S Mini Type (3 pins)	D5
		2SK665	20	8	0.1	150	20	40	1000	1000	S Mini Type (3 pins)	D5
		2SK1228 *	50	10	0.05	150	* 39	27	2000	2000	Mini Type (3 pins)	D9
		2SK1374 *	50	10	0.05	150	* 39	27	2000	2000	S Mini Type (3 pins)	D5
	Pch	2SJ146	* -50	-8	-0.1	150	13	<150	40	60	Mini Type (3 pins)	D10

\*2.5V Drive