Ordering number: EN3154



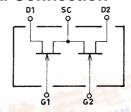
FC11

N-Channel Junction Silicon FET

## Low-Frequency General-Purpose Amp, **Differential Amp Applications**

### **Features**

- · Adoption of FBET process.
- · Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- · The FC11 is formed with two chips, being equivalent to the 2SK771, placed in one package.
- · Excellent in the thermal equilibrium and pair capability and suitable for use in differential amp.
- · Common source.



## **Electrical Connection**

## **Specifications**

## Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSX</sub>		40	V
Gate-to-Drain Voltage	V <sub>GDS</sub>	, s. t. t. f. f.	-40	V
Gate Current	IG	400 PT. 12	10	mA
Drain Current	I <sub>D</sub>		10	mA
Allowable Power Dissipation	PD	1unit 1	200	mW
Total Dissipation	PT	No.	300	mW
Junction Temperature	Tj	C.C.	150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Llmit
			min	typ	max	Unit
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I <sub>G</sub> =10μA, V <sub>DS</sub> =0	-40		40-1	V
Gate Cutoff Current	I <sub>GSS</sub>	V <sub>GS</sub> =-20V, V <sub>DS</sub> =0V	- N W		-1.0	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1μ <b>A</b>	-0.3	-0.9	-1.8	V
Gate-to-Source Voltage Drop	ΔVGS	VGS large - VGS small  , VDS=10V, ID=1mA			30	mV
Drain Current	IDSS	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V	1.2*		6.0*	mA
Drain Current Ratio		V <sub>DS</sub> =10V, I <sub>DSS</sub> small/I <sub>DSS</sub> large	0.9			
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1kHz	4.5	9.0		mS
Forward Transfer Admittance Ratio		V <sub>DS</sub> =10V,  Y <sub>fS</sub>  small /  Y <sub>fS</sub>  large	0.9			
Input Capacitacnce	Ciss	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1MHz		9.0		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1MHz		2.1		pF
Noise Figure	NF	$V_{DS}=10V$ , $R_{q}=1k\Omega$ , $I_{D}=1mA$ , $f=1kHz$		1.5		dB

Note\*:The FC11 is classified by I<sub>DSS</sub> as follows (unit:mA)

2.5 Е 1.2 D 3.0

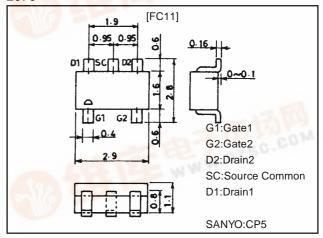
Marking:11 I<sub>DSS</sub> rank:D,E

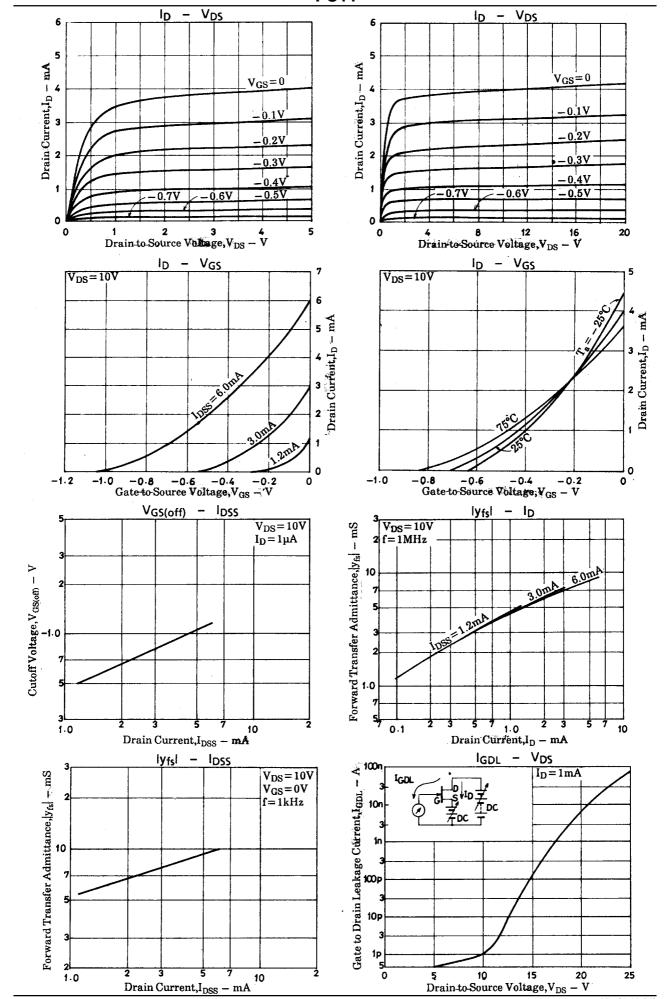
The Specifications shown above are for each individual transistor.

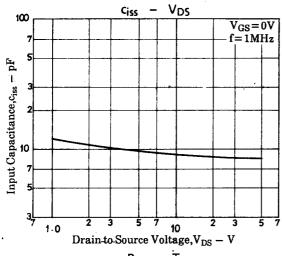
# **Package Dimensions**

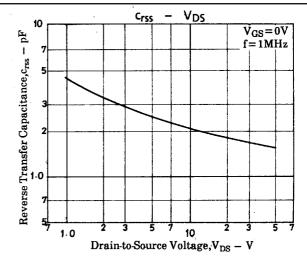
unit:mm

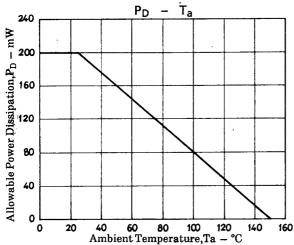
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