

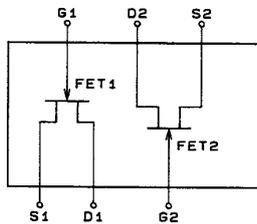
**FC13**

N-Channel Junction Silicon FET Low-Frequency General-Purpose Amp, Differential Amp, Analog Switch Applications

Features

- Composite type with 2 FETs contained in the CP package currently in use, improving the mounting efficiency greatly.
- The FC13 is formed with two chips, being equivalent to the 2SK303, placed in one package.
- Excellent in thermal equilibrium and pair capability and especially suited for differential amp.

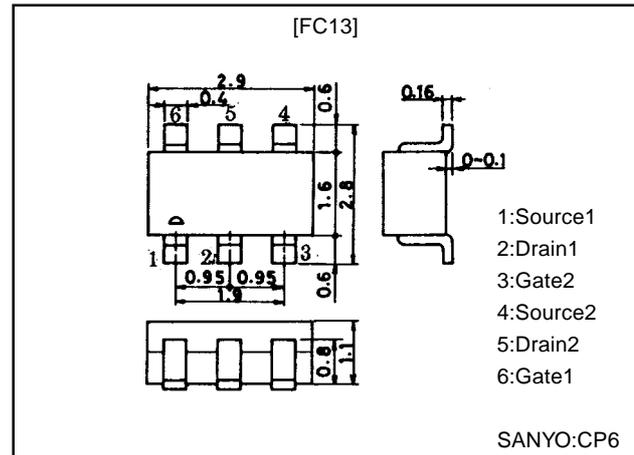
Electrical Connection



Package Dimensions

unit:mm

2095A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		30	V
Gate-to-Drain Voltage	V_{GDS}		-30	V
Gate Current	I_G		10	mA
Drain Current	I_D		10	mA
Allowable Power Dissipation	P_D	1unit	200	mW
Total Dissipation	P_T		300	mW
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
G-D Breakdown Voltage	$V_{(BR)DGD}$	$I_G = -10\mu A, V_{DS} = 0$	-30			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	-0.3	-0.9	-2.5	V
G-S Voltage Drop	ΔV_{GS}	$V_{GS}(small/large), V_{DS} = 10V, I_D = 1mA$			50	mV
Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	1.2*		6.0*	mA
Drain Current Ratio		$V_{DS} = 10V, I_{DSS}(small/large)$	0.9			
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	3.0	5.0		mS
Forward Transfer Admittance Ratio		$V_{DS} = 10V, Y_{fs} (small/large)$	0.9			
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		5.0		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		0.9		pF
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$V_{DS} = 10mV, V_{GS} = 0$		250		Ω

The specifications shown above are for each individual transistor.

Marking:13

Note*:The FC13 is classified by FET1 I_{DSS} as follows :

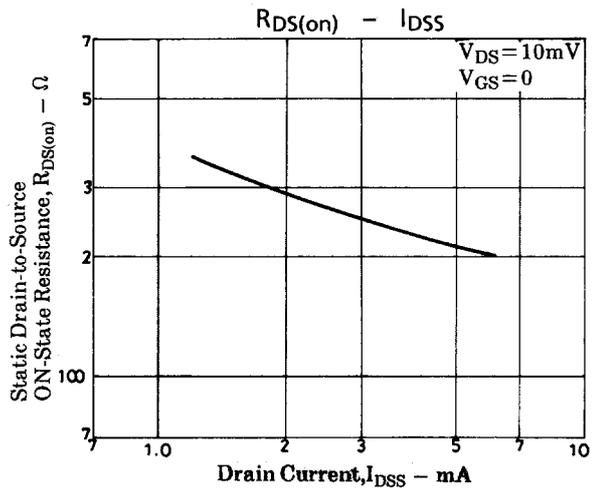
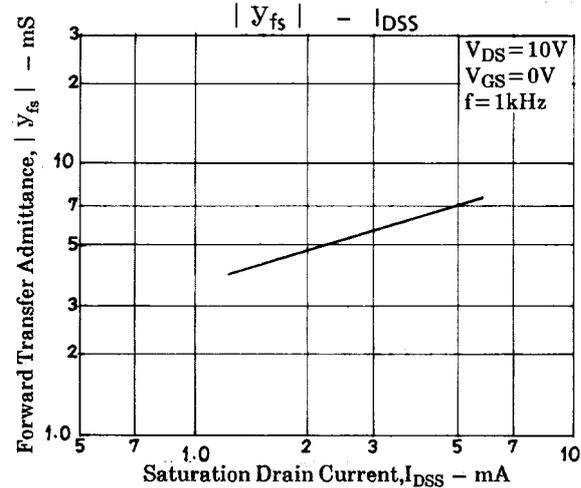
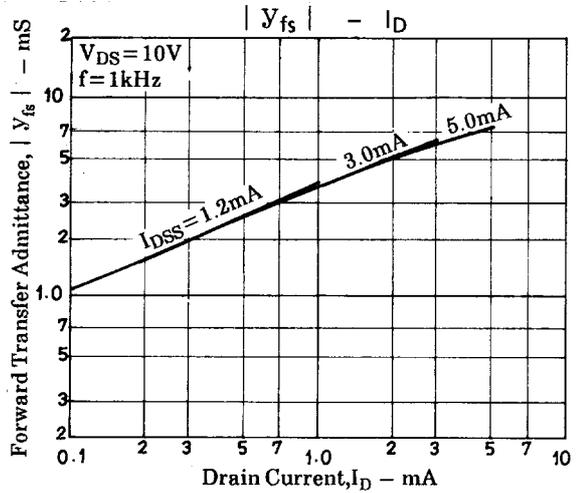
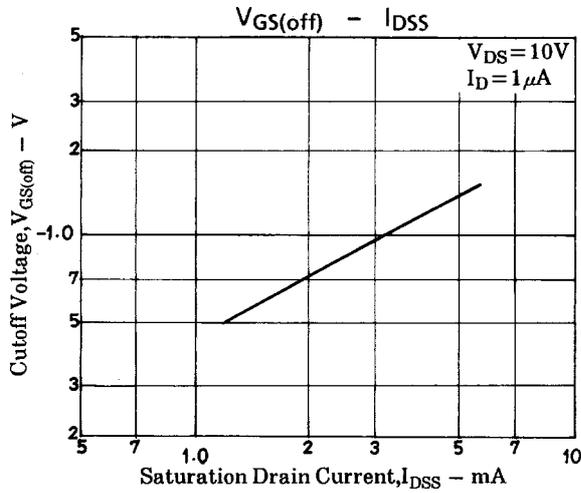
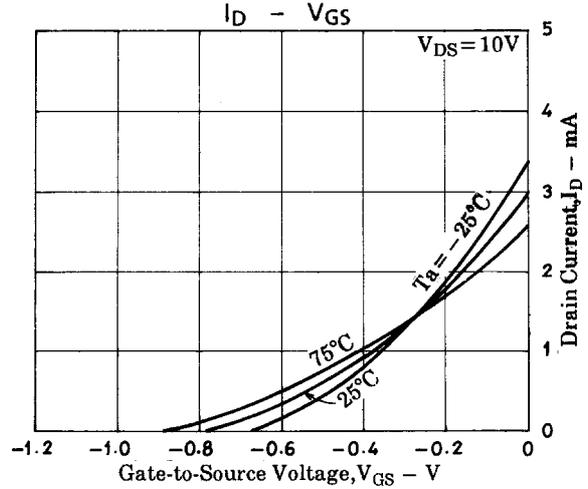
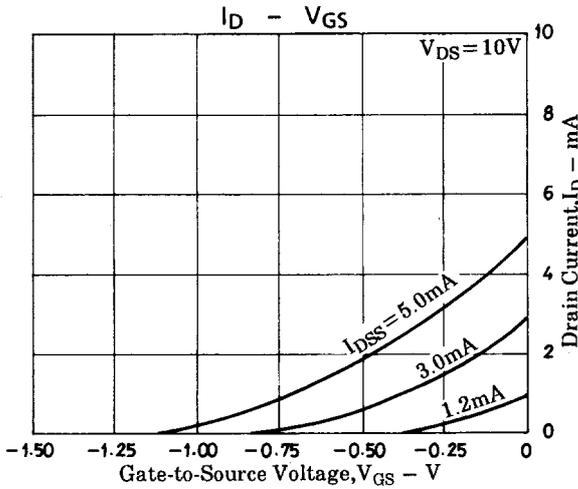
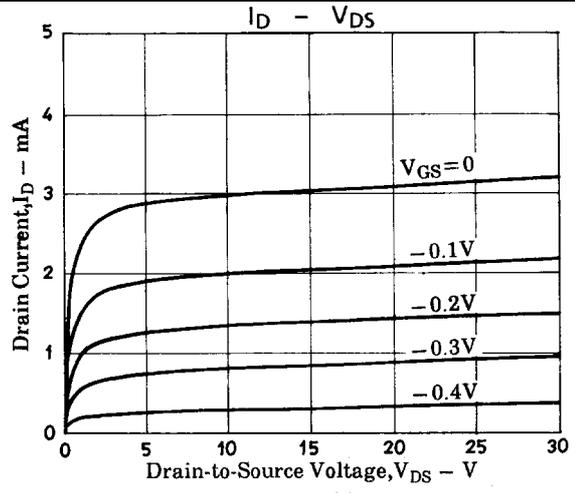
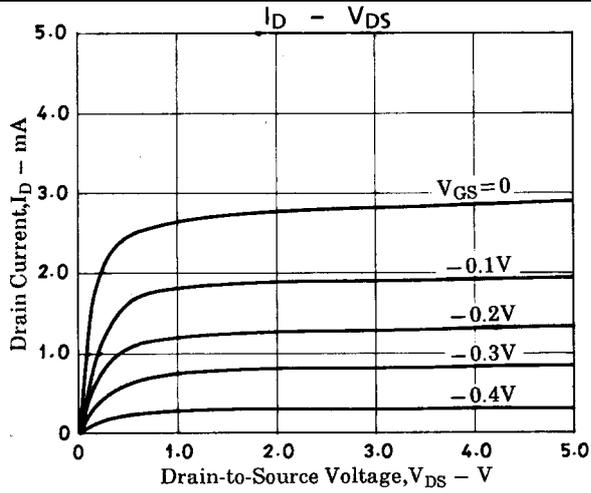
I_{DSS} rank:D,E

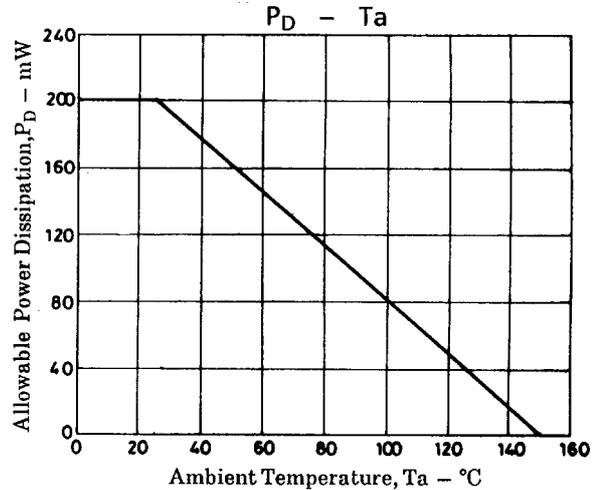
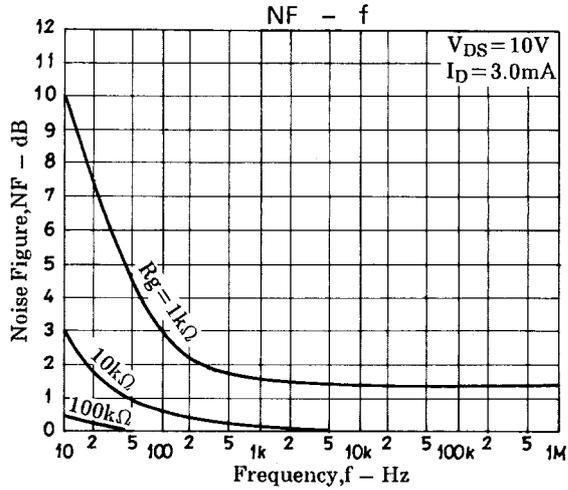
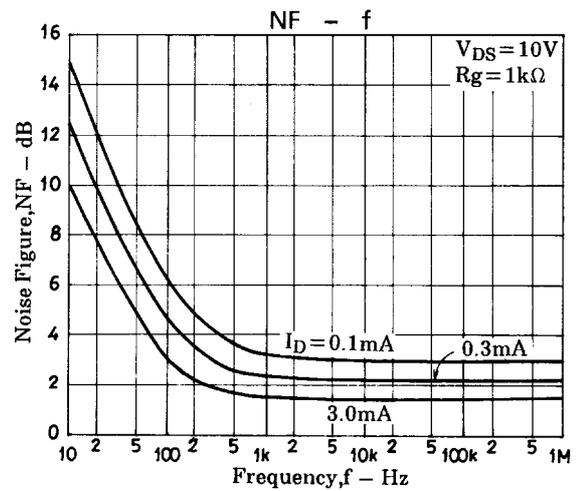
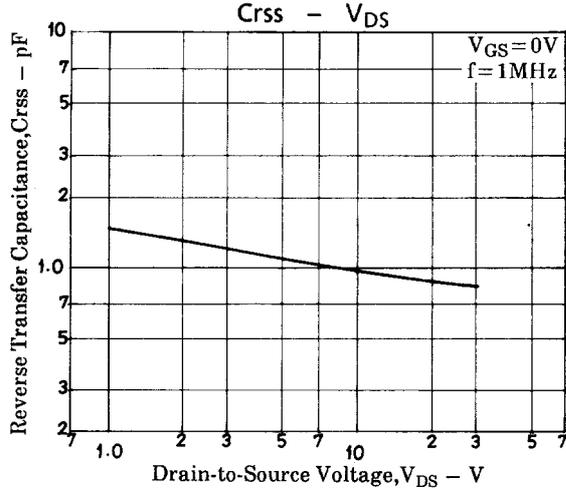
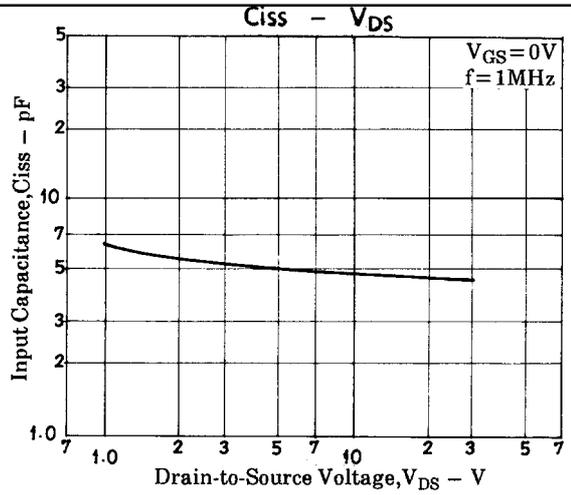
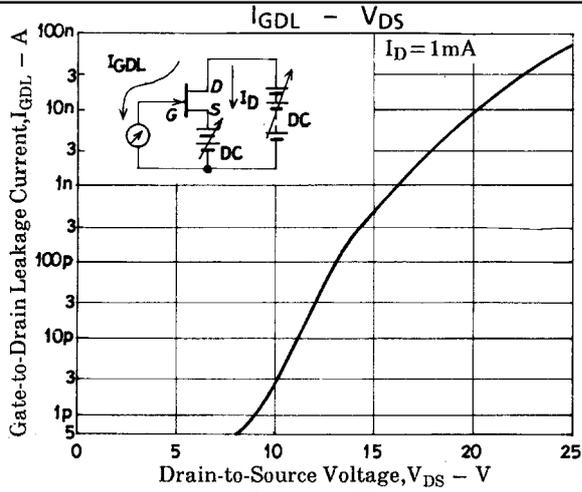
1.2	D	3.0	2.5	E	6.0
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