

FC11

T-27-25



2070

N-Channel Junction Silicon FET

Low-Frequency General-Purpose Amp, Differential Amp Applications

©3154

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 thermal equilibrium and pair capability and suitable for use in differential amp.
- Common source.

Absolute Maximum Ratings at Ta = 25°C

			unit
Drain to Source Voltage	V _{DSX}	40	V
Gate to Drain Voltage	V _{GDS}	-40	V
Gate Current	I _G	10	mA
Drain Current	I _D	10	mA
Allowable Power Dissipation	P _D	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

			min	typ	max	unit
Gate to Drain	V _{(BR)GDS}	I _G = -10μA, V _{DS} = 0V	-40			V
Breakdown Voltage						
Gate Cutoff Current	I _{GSS}	V _{GS} = -20V, V _{DS} = 0V			-1.0	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1μA	-0.3	-0.9	-1.8	V
Gate to Source Voltage Drop	ΔV _{GS}	V _{GS large} - V _{GS small} , V _{DS} = 10V, I _D = 1mA			30	mV
Drain Current	I _{DSS}	V _{DS} = 10V, V _{GS} = 0V		1.2*	6.0*	mA

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* : The FC11 is classified by I_{DSS} as follows (unit : mA) :

1.2	D	3.0	2.5	E	6.0
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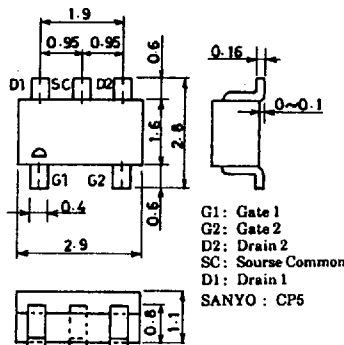
(Note) Marking : 11

I_{DSS} rank : D,E

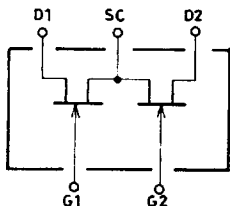
The specifications shown above are for each individual transistor.

Case Outline 2070

(unit : mm)

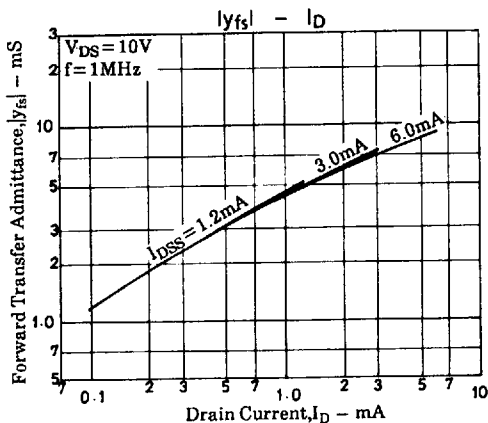
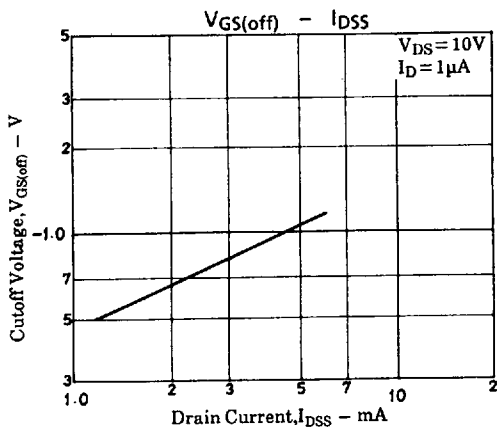
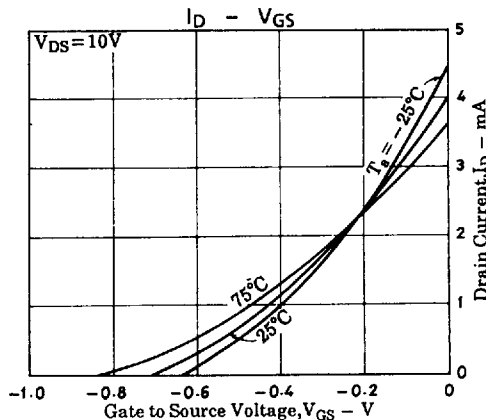
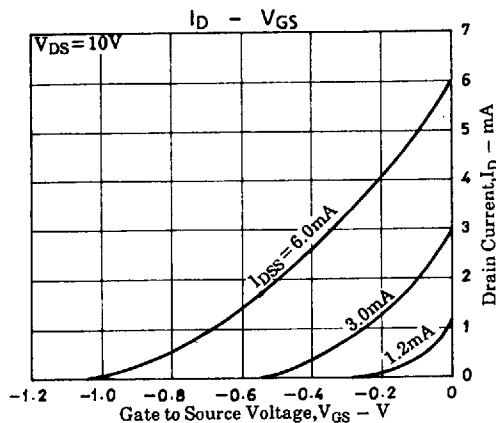
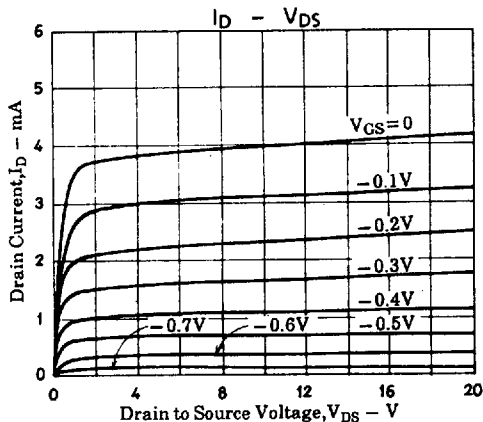
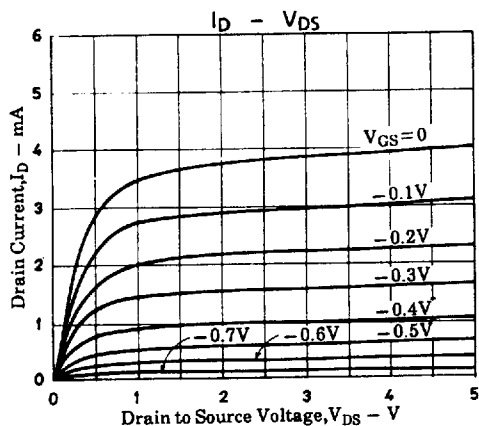


Electrical Connection



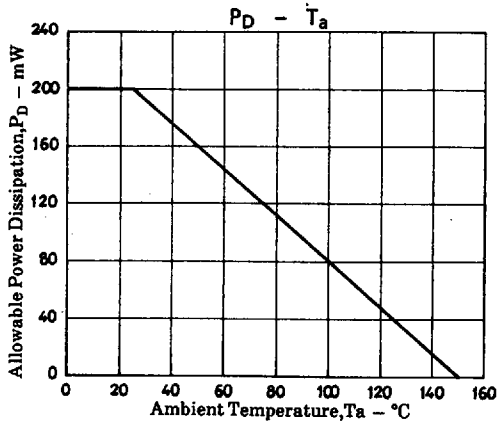
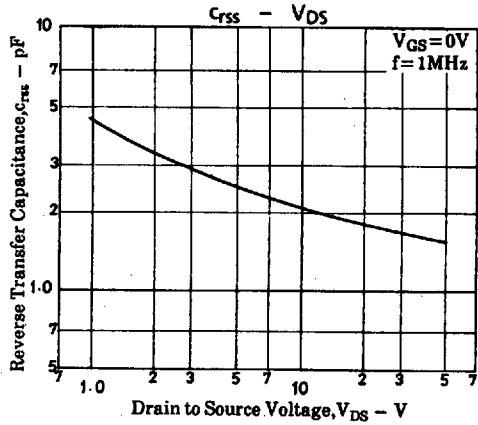
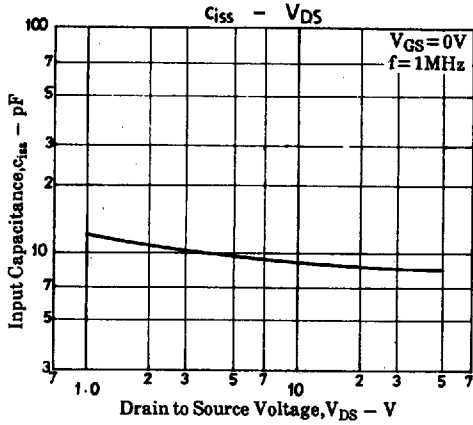
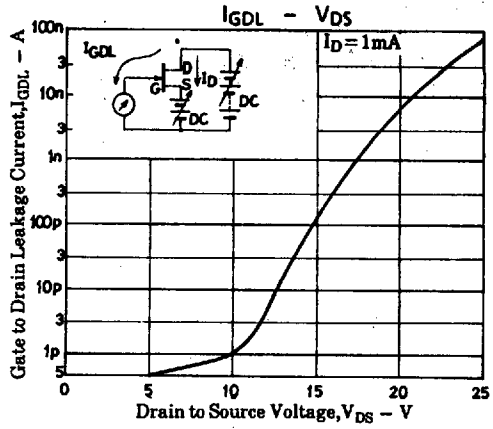
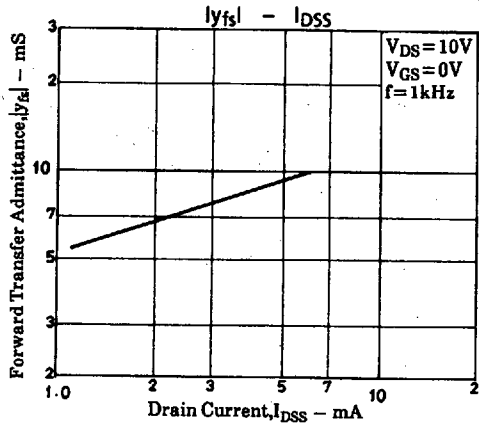
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			min	typ	max	unit
Drain Current Ratio		$V_{DS} = 10V, I_{DSS\ small}/I_{DSS\ large}$	0.9			
Forward Transfer Admittance $ y_{fs} $		$V_{DS} = 10V, V_{GS} = 0V, f = 1kHz$	4.5	9.0		mS
Forward Transfer Admittance Ratio		$V_{DS} = 10V, y_{fs} _{small}/ y_{fs} _{large}$	0.9			
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0V, f = 1MHz$		9.0		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 10V, V_{GS} = 0V, f = 1MHz$		2.1		pF
Noise Figure	NF	$V_{DS} = 10V, R_g = 1k\Omega, I_D = 1mA, f = 1kHz$		1.5		dB



FC11

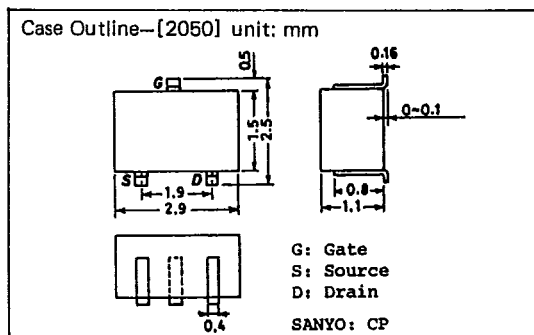
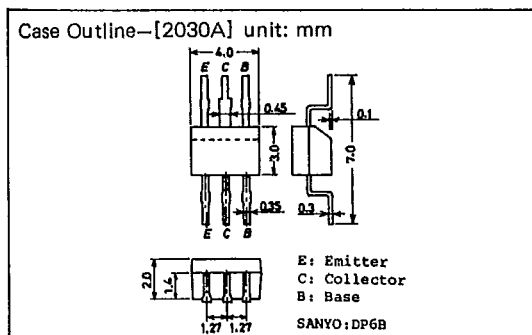
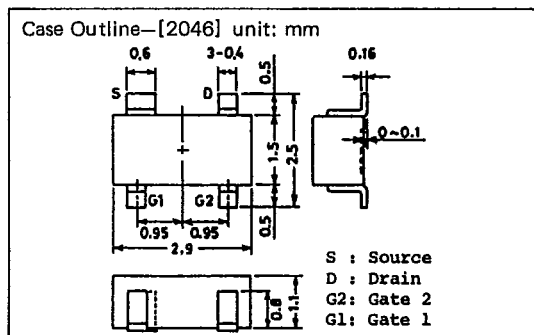
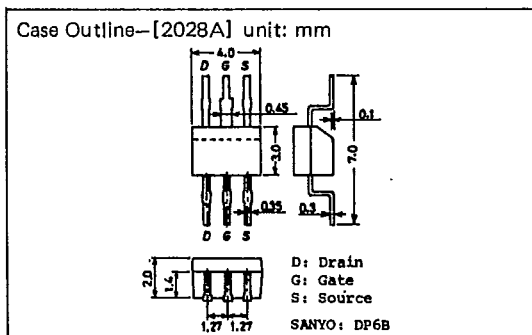
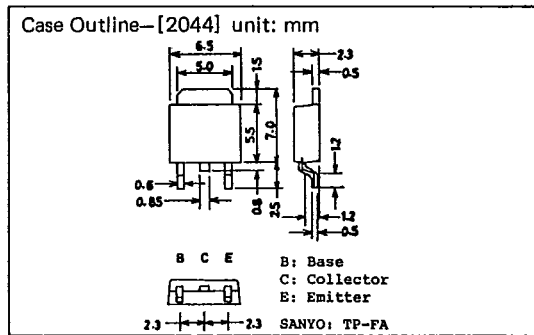
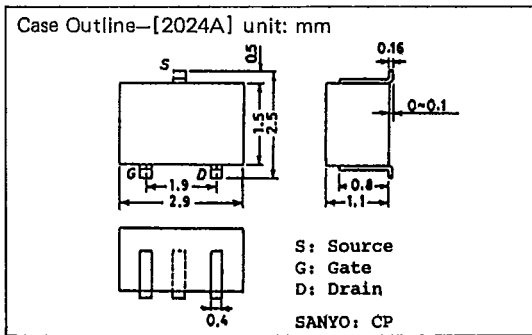
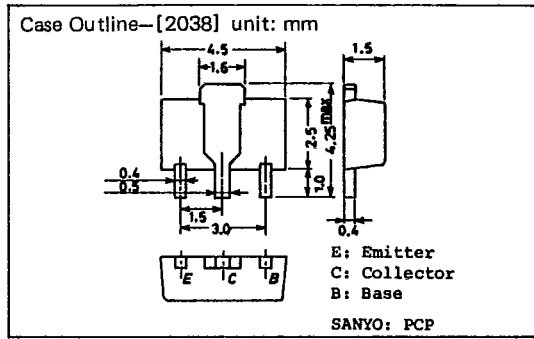
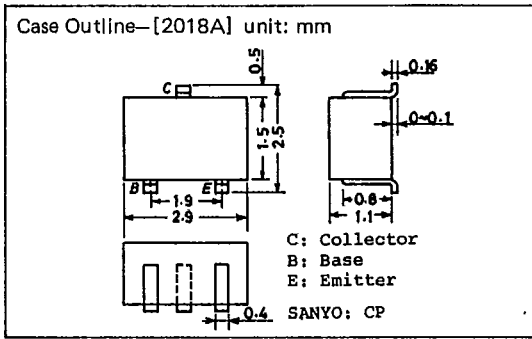
T-27-25



T-91-20

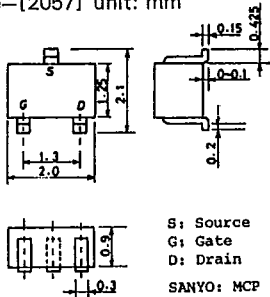
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- All of Sanyo surface mount transistor case outlines are illustrated below.
- All dimensions are in mm, and dimensions which are not followed by min. or max. are represented by typical values.
- No marking is indicated.



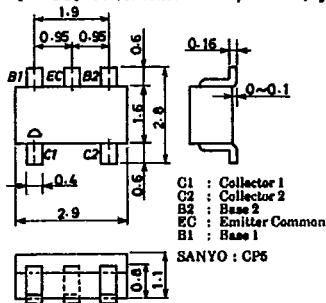
T-91-20

Case Outline—[2057] unit: mm



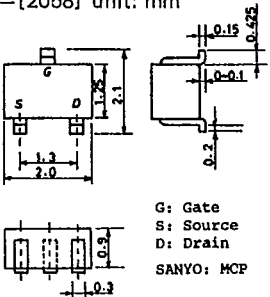
S: Source
G: Gate
D: Drain
SANYO: MCP

Case Outline—[2066] unit: mm



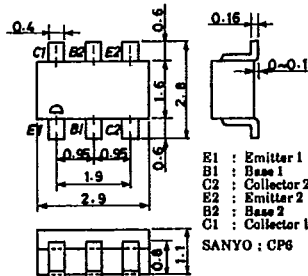
C1 : Collector 1
C2 : Collector 2
B2 : Base 2
EC : Emitter Common
B1 : Base 1
SANYO : CP6

Case Outline—[2058] unit: mm



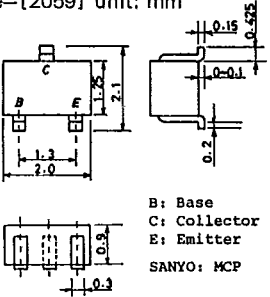
G: Gate
S: Source
D: Drain
SANYO: MCP

Case Outline—[2067] unit: mm



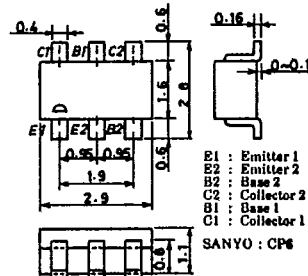
E1 : Emitter 1
B1 : Base 1
C2 : Collector 2
E2 : Emitter 2
B2 : Base 2
C1 : Collector 1
SANYO : CP6

Case Outline—[2059] unit: mm



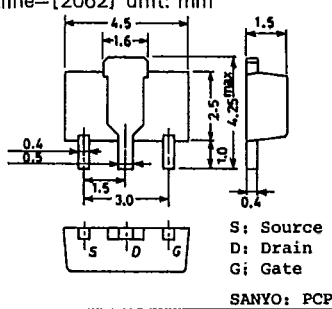
B: Base
C: Collector
E: Emitter
SANYO: MCP

Case Outline—[2068] unit: mm



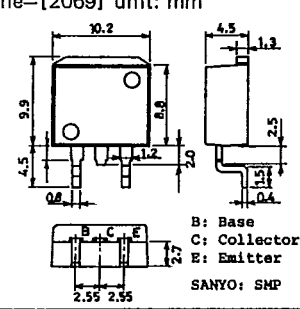
B1 : Emitter 1
E2 : Emitter 2
B2 : Base 2
C2 : Collector 2
B1 : Base 1
C1 : Collector 1
SANYO : CP6

Case Outline—[2062] unit: mm



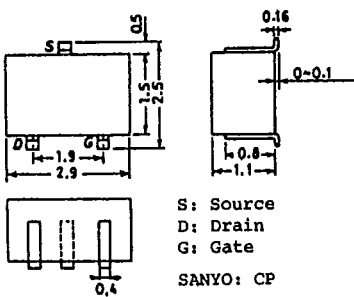
S: Source
D: Drain
G: Gate
SANYO: PCP

Case Outline—[2069] unit: mm



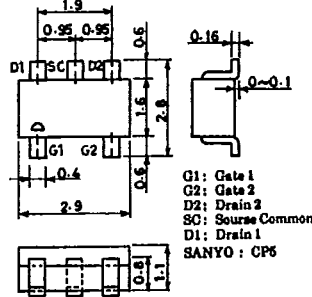
B: Base
C: Collector
E: Emitter
SANYO: SMP

Case Outline—[2065] unit: mm



S: Source
D: Drain
G: Gate
SANYO: CP

Case Outline—[2070] unit: mm



G1 : Gate 1
G2 : Gate 2
D2 : Drain 2
SC : Source Common
D1 : Drain 1
SANYO : CP6

T-9120

