

TENTATIVE
Features

- Composite type with an J-FET transistor and a PNP transistor contained in the conventional CP package, improving the mounting efficiency greatly.
- The FC22 is formed with two chips, one being equivalent to the 2SC4639 and the other the 2SK3266, placed in one package.
- Drain and emitter are shared.

Absolute Maximum Ratings / Ta=25°C
[FET]

Drain - to - Source Voltage	VDSX	15	V
Gate - to - Drain Voltage	VGDS	- 15	V
Gate Current	IG	10	mA
Drain Current	ID	50	mA
Allowable Power Dissipation	PD	200	mW

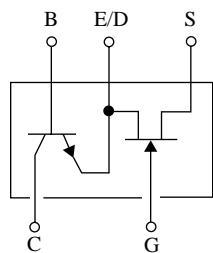
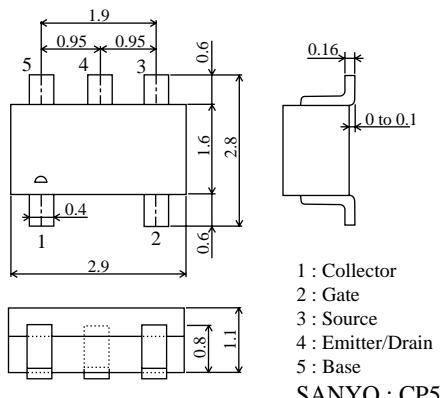
[TR]

Collector - to - Base Voltage	VGBO	55	V
Collector - to - Emitter Voltage	VCEO	50	V
Emitter - to - Base Voltage	VEBO	6	V
Collector Current	IC	150	mA
Collector Current(Pulse)	ICP	300	mA
Base Current	IB	30	mA
Collector Dissipation	PC	200	mW

[Common Ratings]

Total Dissipation	PT	300	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	- 55 to +150	°C

Continued on next page.

Electrical Connection

Package Dimensions 2122
(unit : mm)


Specifications and information herein are subject to change without notice.

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FC22

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Electrical Characteristics at Ta=25°C

[FET]

			min	typ	max	unit
G-D Breakdown Voltage	V(BR)GDS	IG=-10μA , VDS=0	-15			V
Gate Cutoff Current	IGSS	VGS=-10V , VDS=0			-1.0	nA
G-S Cutoff Voltage	VGS(OFF)	VDS=5V , ID=100μA	-0.3	-0.7	-1.5	V
Drain Current	IDSS	VDS=5V , VGS=0	6.0*		32.0*	mA
Forward Transfer Admittance	yfs	VDS=5V , VGS=0, f=1kHz	20	33		mS
Input Capacitance	Ciss	VDS=5V , VGS=0, f=1MHz		10.0		pF
Reverse Transfer Capacitance	Crss	VDS=5V , VGS=0, f=1MHz		2.9		pF
Noise Figure	NF	VDS=5V , Rg=1kΩ , ID=1mA, f=1kHz		1.0		dB

[TR]

Collector Cutoff Current	ICBO	V _{CB} =35V , I _E =0	0.1	μA	
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V , I _C =0	0.1	μA	
DC Current Gain	h _{FE}	V _{CE} =6V , I _C =1mA	135	400	
Gain-Bandwidth Product	f _T	V _{CE} =6V , I _C =10mA	200	MHz	
Output Capacitance	C _{OB}	V _{CB} =6V , f=1MHz	1.7	pF	
C-E Saturation Voltage	V _{CE(sat)}	I _C =50mA , I _B =5mA	0.08	0.4	V
B-E Saturation Voltage	V _{BE(sat)}	I _C =50mA , I _B =5mA	0.8	1.0	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C =10μA , I _E =0	55		V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C =1mA , R _{BE} =∞	50		V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E =10μA , I _C =0	6		V
Turn-On Time	t _{on}	See speacified Test Circuit.	0.15	μs	
Storage Time	t _{stg}	"	0.75	μs	
Fall Time	t _f	"	0.20	μs	

* : The FC22 is classified by IDSS as follows : (unit : mA)

6.0	F	12.0	10.0	G	20.0	16.0	H	32.0
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IDSS rank : F, G , H

The specifications shown above are for each individual FET or transistor.

Switching Time Test Circuit

