Ordering number:EN3965

FC150

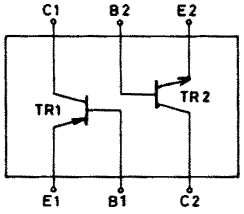
PNP/NPN Epitaxial Planar Silicon Composite Transistor

Low-Frequency General-Purpose Amp, Driver Applications

Features

- Composite type with 2 transistors contained in the CP package currently in use, improving the mounting efficiency greatly.
- The FC150 is formed with two chips, being equivalent to the 2SA1813/2SC4413, placed in one package.
- Adoption of FBET process.
- High DC current gain.
- Hgih V_{EBO}.

Electrical Connection



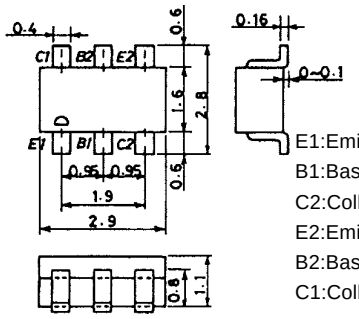
TR1=PNP
TR2=NPN

Package Dimensions

unit:mm

2067

[FC150]



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

SANYO:CP6

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(–30)60	V
Collector-to-Emitter Voltage	V_{CEO}		(–25)50	V
Emitter-to-Base Voltage	V_{EBO}		(–)15	V
Collector Current	I_C		(–150)100	mA
Collector Current (Pulse)	I_{CP}		(–300)200	mA
Base Current	I_B		(–30)20	mA
Collector Dissipation	P_C	1 unit	200	mW
Total Dissipation	P_T		300	mW
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditons	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=(–20V)40V, I_E=0			–0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=(–)10V, I_C=0			–0.1	μA
DC Current Gain	h_{FE}	V_{CE}=(–)5V, I_C=(–)1mA	(500)800	(800)1500	(1200)3200	
Gain-Bandwidth Product	f_T	V_{CE}=(–)10V, I_C=(–)10mA		(210)200		MHz
Output Capacitance	Cob	V_{CB}=(–)10V, f=1MHz		(2.6)1.5		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=(–)50mA, I_B=(–)1mA		(–0.15)0.1	(–)0.3	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=(–)50mA, I_B=(–)1mA		(–0.78)0.8	(–)1.1	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=(–)10μA, I_E=0	(–30)60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=(–)1mA, R_{BE}=∞	(–25)50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_C=(–)10μA, I_C=0	(–)15			V

Note:The specifications shown above are for each individual transistor.

( ):PNP

Marking:150

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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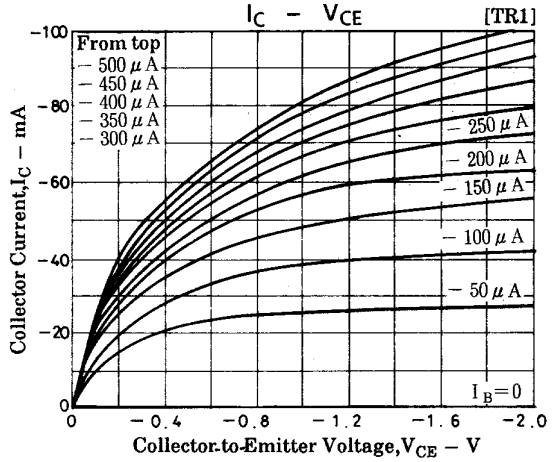

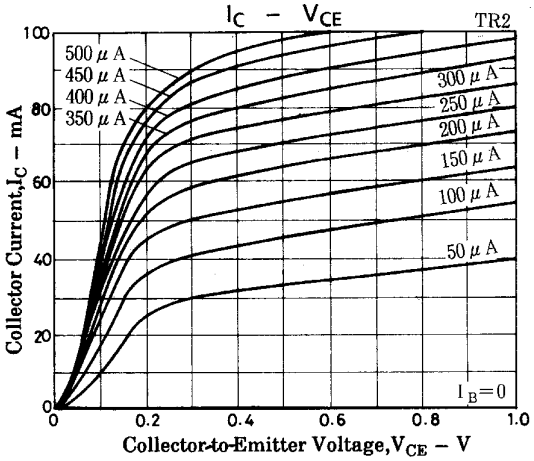

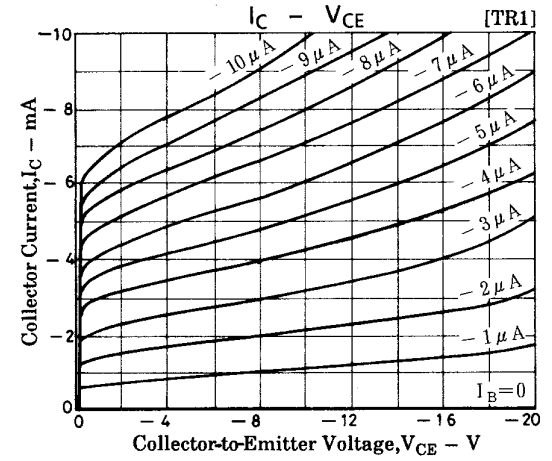

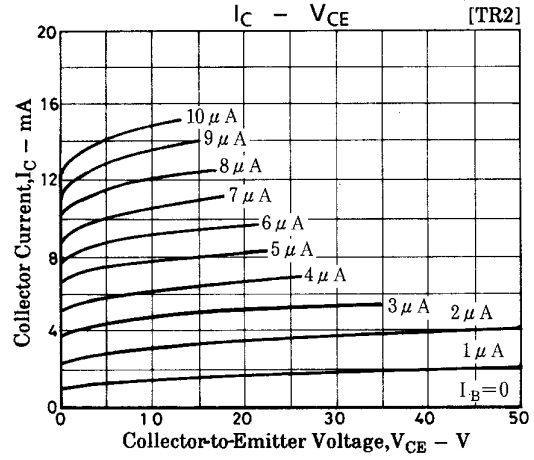

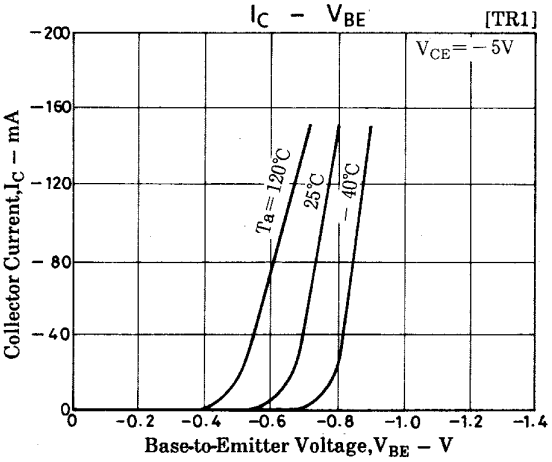

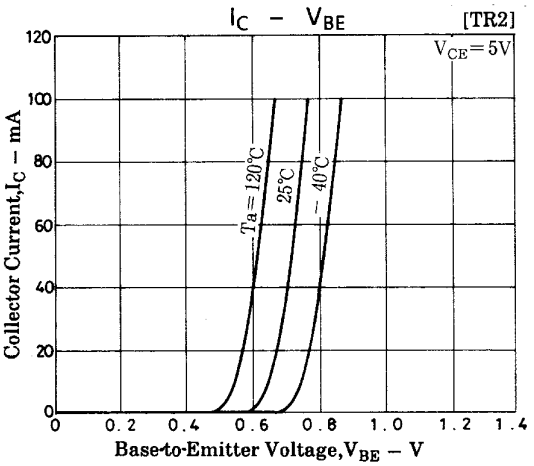

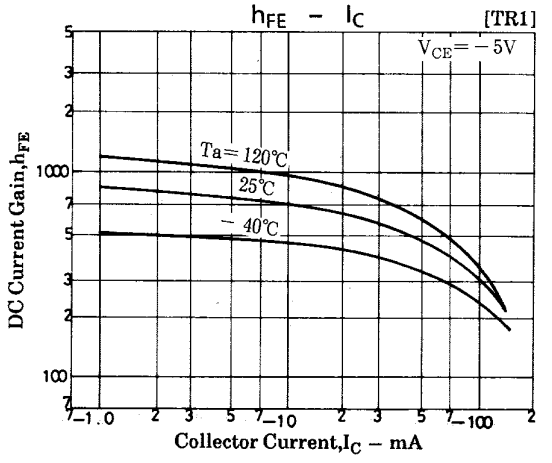

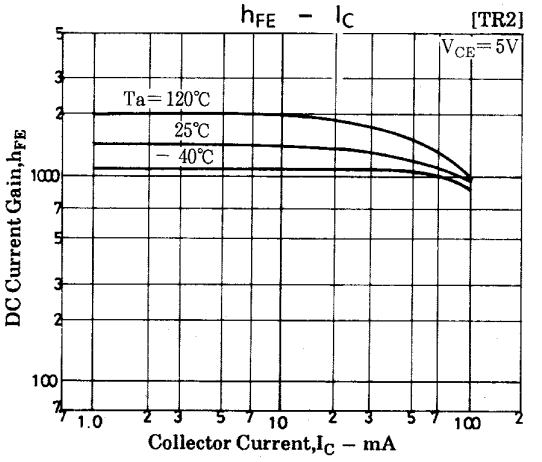

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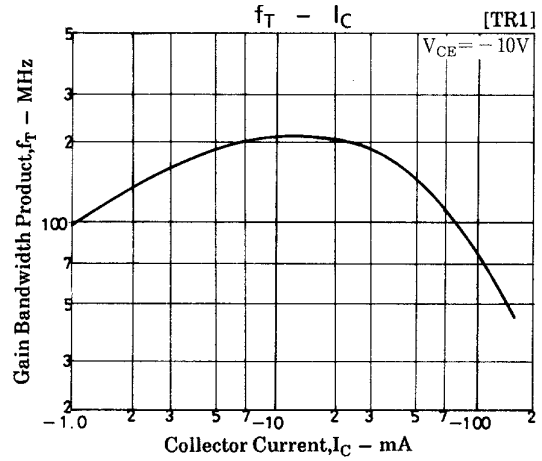

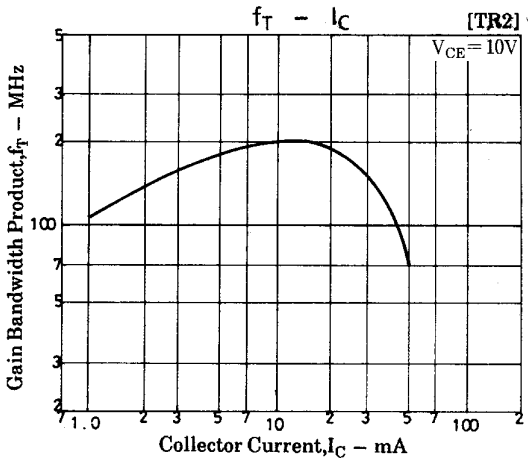

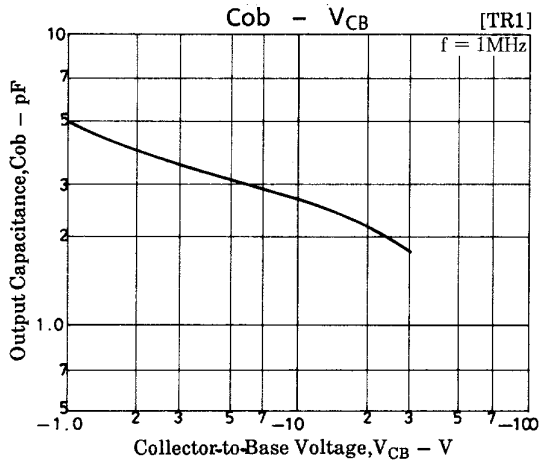

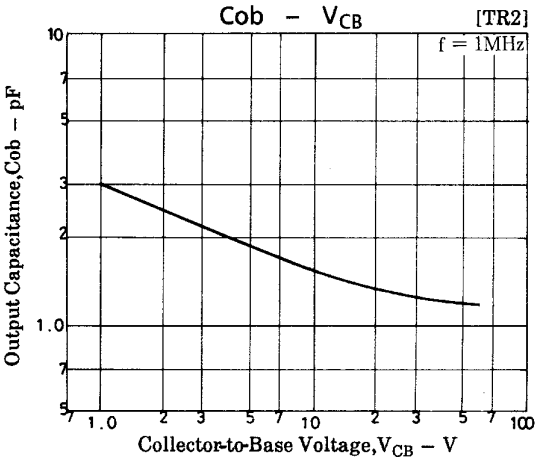

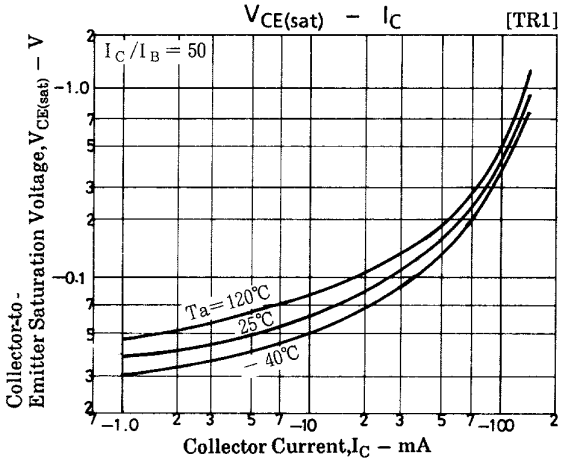

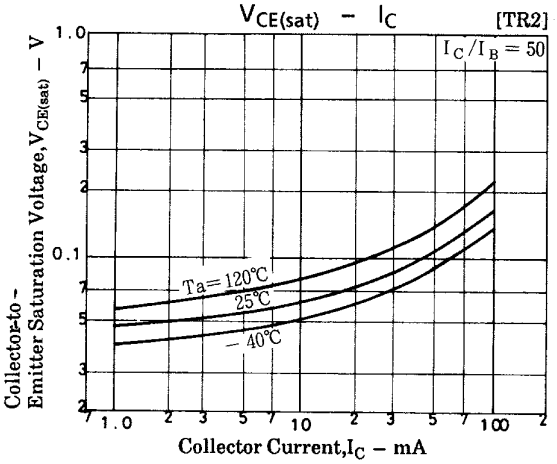

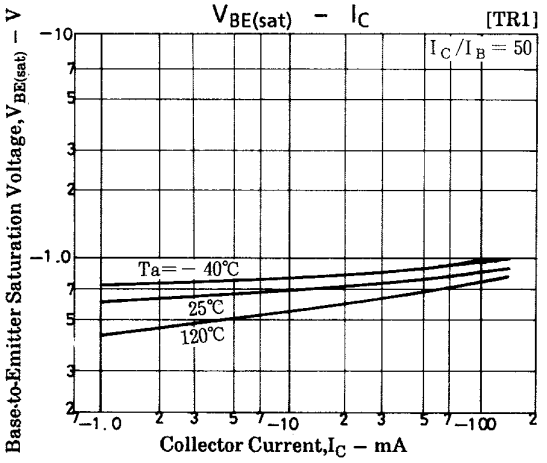

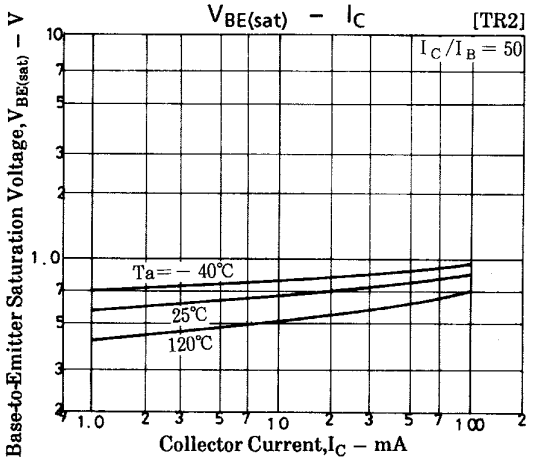

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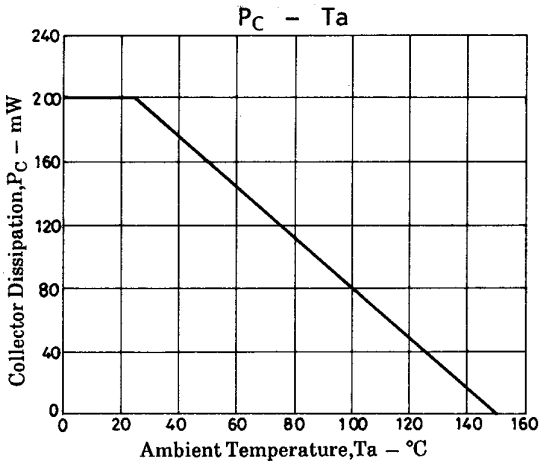

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