



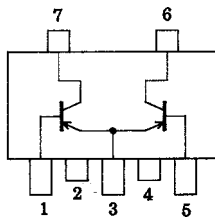
FP215

PNP Epitaxial Planar Silicon Composite Transistors High-Frequency Amp, Differential Amp Applications

Features

- Composite type with 2 transistors contained in the PCP package currently in use, improving the mounting efficiency greatly.
- The FP215 is formed with two chips, being equivalent to the 2SA1724, placed in one package.
- Excellent in thermal equilibrium and pair capability.

Electrical Connection

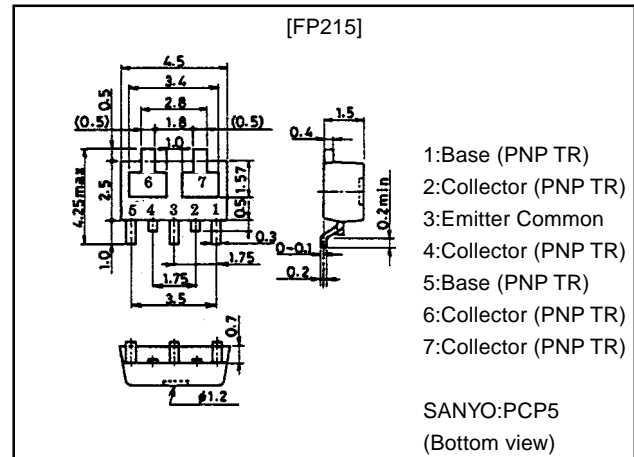


- 1:Base (PNP TR)
2:Collector (PNP TR)
3:Emitter Common
4:Collector (PNP TR)
5:Base (PNP TR)
6:Collector (PNP TR)
7:Collector (PNP TR)
(Top view)

Package Dimensions

unit:mm

2108A



Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		-30	V
Collector-to-Emitter Voltage	V_{CEO}		-20	V
Emitter-to-Base Voltage	V_{EBO}		-3	V
Collector Current	I_C		-300	mA
Collector Current (Pulse)	I_{CP}		-600	mA
Collector Dissipation	P_C	Mounted on ceramic board (250mm ² ×0.8mm) 1 unit	0.75	W
Total Dissipation	P_T	Mounted on ceramic board (250mm ² ×0.8mm)	1.0	W
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CB0}	$V_{CB}=-20\text{V}, I_E=0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-2\text{V}, I_C=0$			-1.0	μA
DC Current Gain	h_{FE1}	$V_{CE}=-5\text{V}, I_C=-50\text{mA}$	15		100	
	h_{FE2}	$V_{CE}=-5\text{V}, I_C=-300\text{mA}$	5			
DC Current Gain Ratio	h_{FE1} (small-large)	$V_{CE}=-5\text{V}, I_C=-50\text{mA}$	0.6	0.93		
Base-to-Emitter Voltage Difference	V_{BE} (large-small)	$V_{CE}=-5\text{V}, I_C=-100\text{mA}$	3.0	25		mV
Gain-Bandwidth Product	f_T	$V_{CE}=-5\text{V}, I_C=-50\text{mA}$	1.5			GHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, f=1\text{MHz}$	4.9			pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=-10\text{V}, f=1\text{MHz}$	4.4			pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$	-0.4	-1.0		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$	-0.9	-1.2		V

Note:The specifications shown above are for individual transistor.

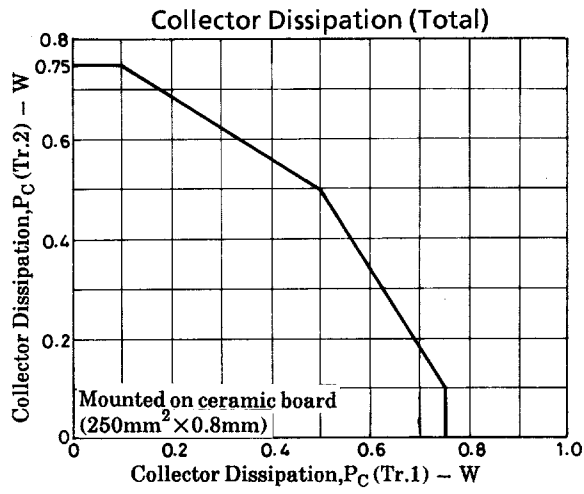
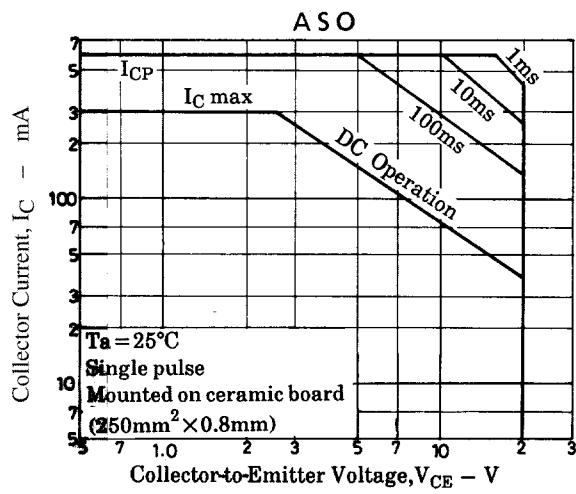
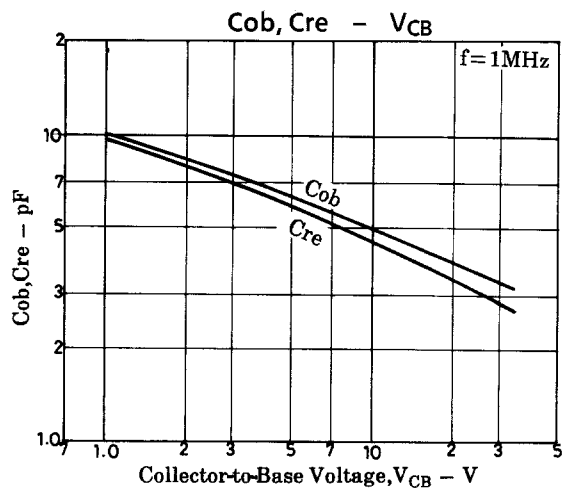
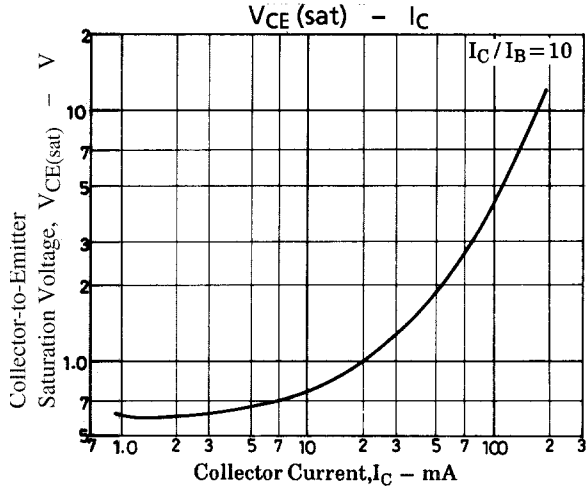
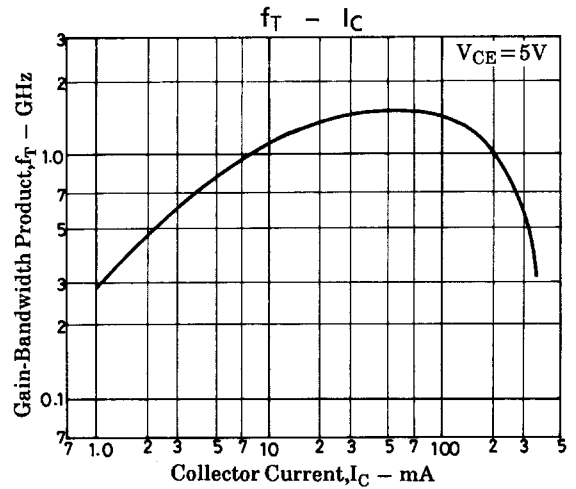
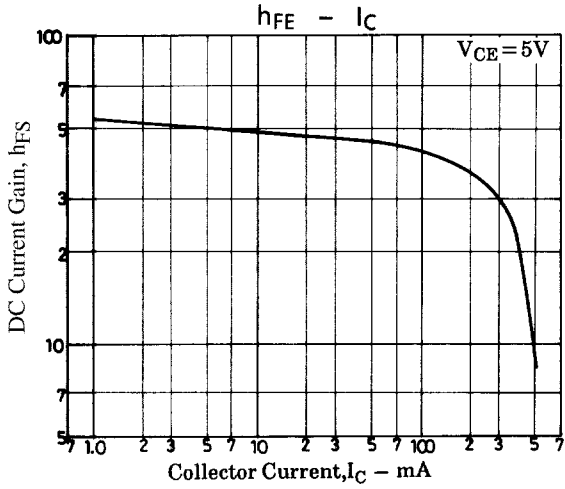
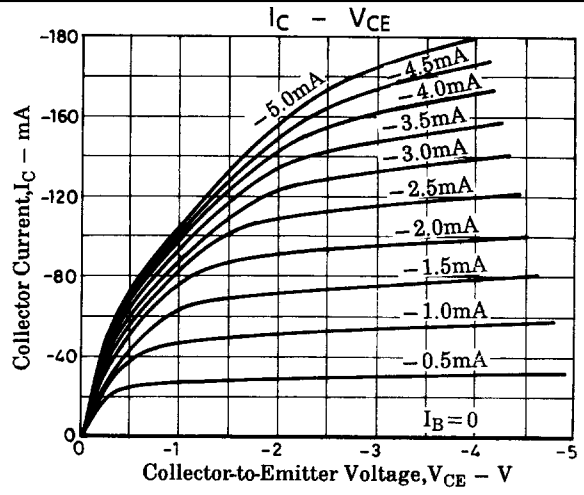
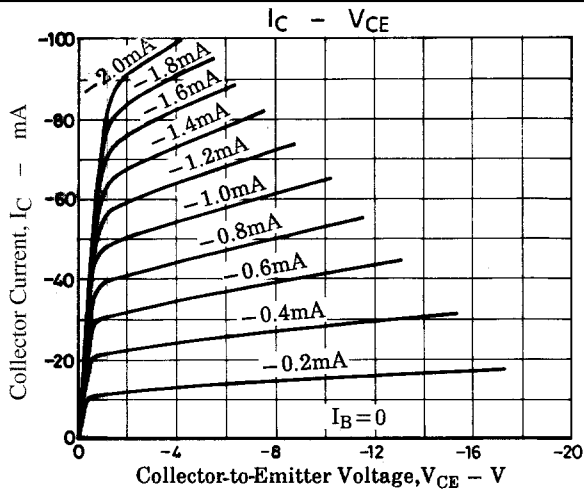
However, the DC Current Gain Ratio and Base-to-Emitter Voltage Difference are for the paired transistors.

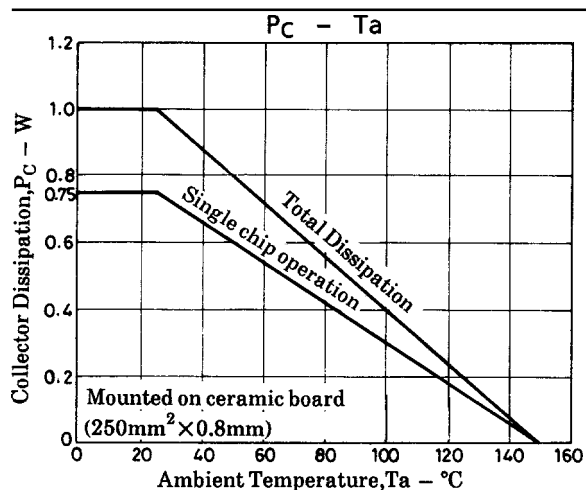
Marking:215

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