

<b>SANYO</b>	No.3197	<b>2SA1753/2SC4577</b>
		PNP/NPN Epitaxial Planar Silicon Transistors Low-Frequency General-Purpose Amp Applications

**Features**

- Small-sized package permitting the 2SA1753/2SC4577-applied sets to be made small and slim.
- Low collector-to-emitter saturation voltage.

( ): 2SA1753

**Absolute Maximum Ratings at Ta = 25°C**

			unit
Collector to Base Voltage	V <sub>CB0</sub>	(-)20	V
Collector to Emitter Voltage	V <sub>CEO</sub>	(-)15	V
Emitter to Base Voltage	V <sub>EBO</sub>	(-)5	V
Collector Current	I <sub>C</sub>	(-)500	mA
Collector Current(Pulse)	I <sub>CP</sub>	(-)1	A
Collector Dissipation	P <sub>C</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	- 55 to + 150	°C

**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> = (-)15V, I <sub>E</sub> = 0			(-)0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> = (-)4V, I <sub>C</sub> = 0			(-)0.1	μA
DC Current Gain	h <sub>FE</sub> (1)	V <sub>CE</sub> = (-)2V, I <sub>C</sub> = (-)10mA	135*		600*	
	h <sub>FE</sub> (2)	V <sub>CE</sub> = (-)2V, I <sub>C</sub> = (-)400mA	(70)80			
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = (-)2V, I <sub>C</sub> = (-)50mA		300		MHz
				(400)		
Output Capacitance	c <sub>ob</sub>	V <sub>CB</sub> = (-)10V, f = 1MHz		(6.5)4.0		pF
C-E Saturation Voltage	V <sub>CE(sat)</sub> (1)	I <sub>C</sub> = (-)5mA, I <sub>B</sub> = (-)0.5mA		(-)15	(-35)30	mV
	V <sub>CE(sat)</sub> (2)	I <sub>C</sub> = (-)200mA, I <sub>B</sub> = (-)10mA		160	300	mV
				(-200)	(-360)	
B-E Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = (-)200mA, I <sub>B</sub> = (-)10mA		(-)0.95	(-)1.2	V
C-B Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = (-)10μA, I <sub>E</sub> = 0	(-)20			V
C-E Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = (-)1mA, R <sub>BE</sub> = ∞	(-)15			V
E-B Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = (-)10μA, I <sub>C</sub> = 0	(-)5			V

\* : The 2SA1753/2SC4577 are classified by 10mA h<sub>FE</sub> as follows :

135	5	270	200	6	400	300	7	600
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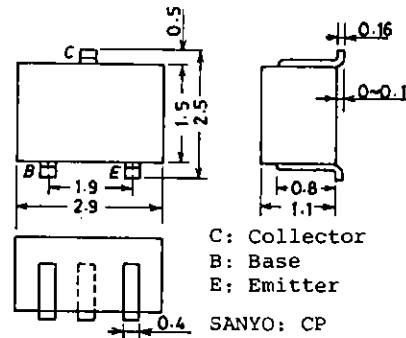
Marking 2SA1753 : ES

2SC4577 : UT

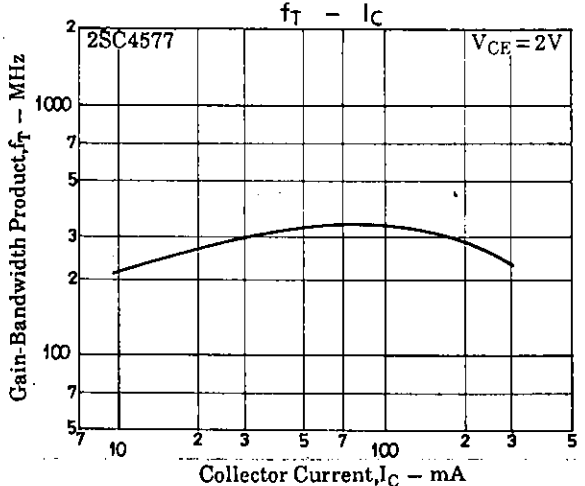
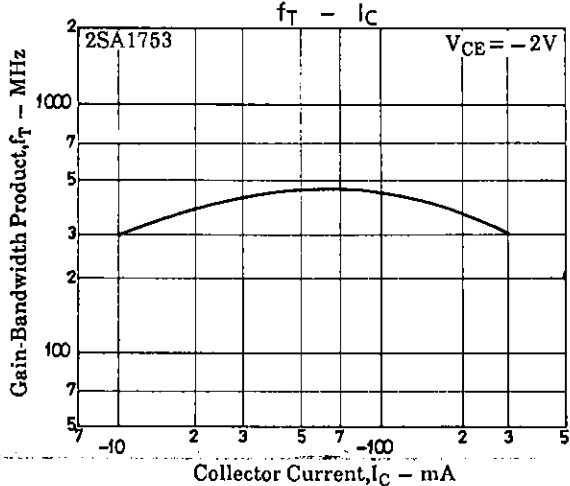
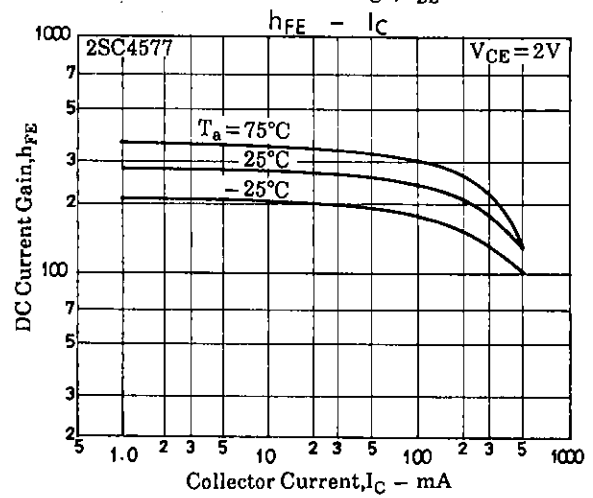
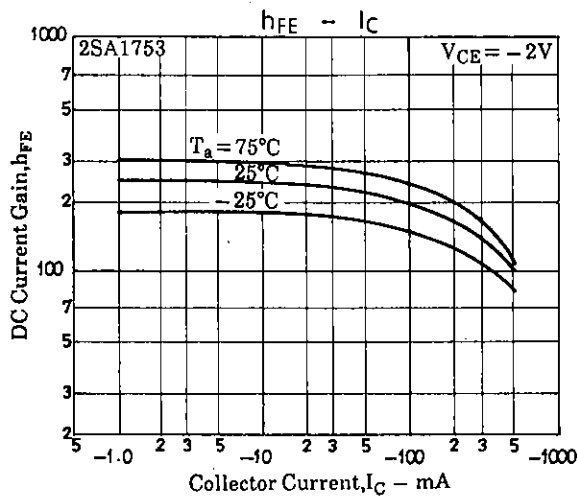
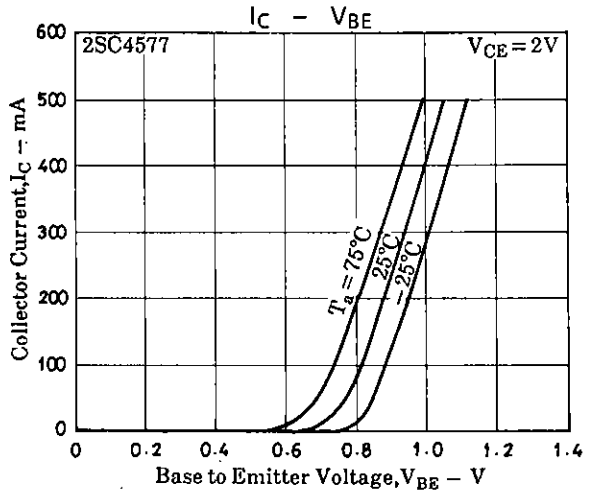
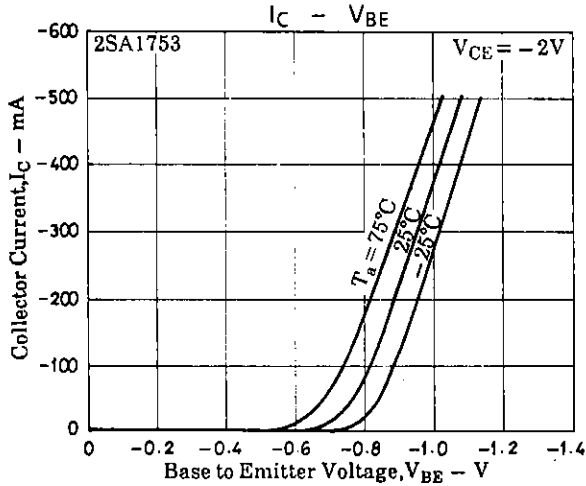
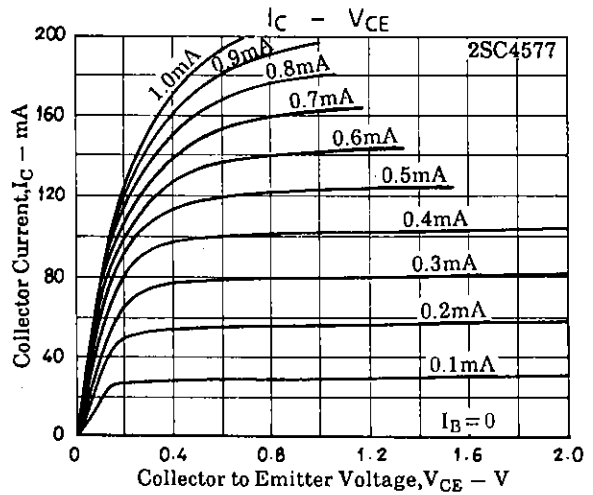
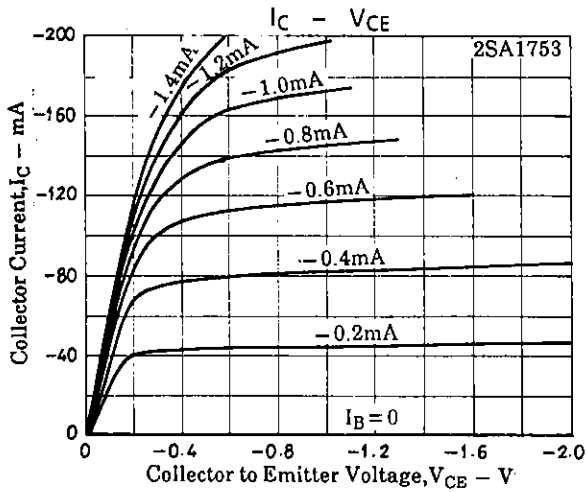
h<sub>FE</sub> rank : 5,6,7

**Package Dimensions 2018A**

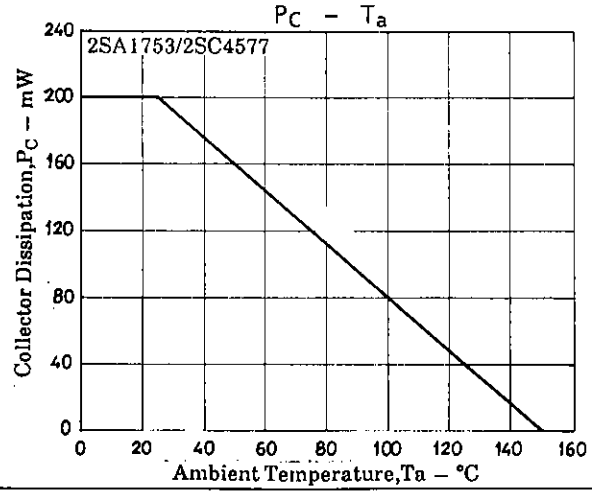
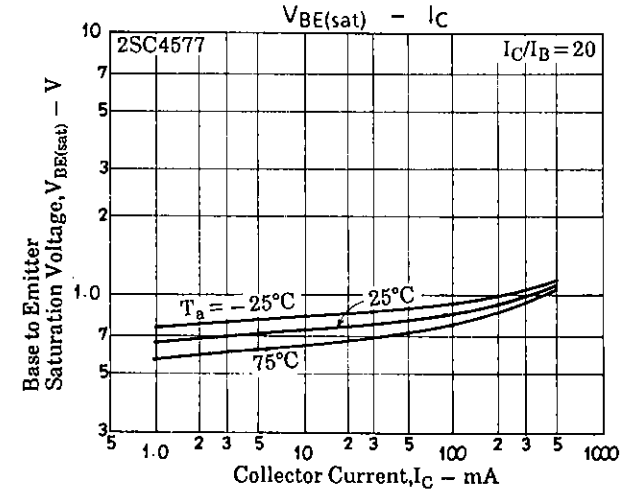
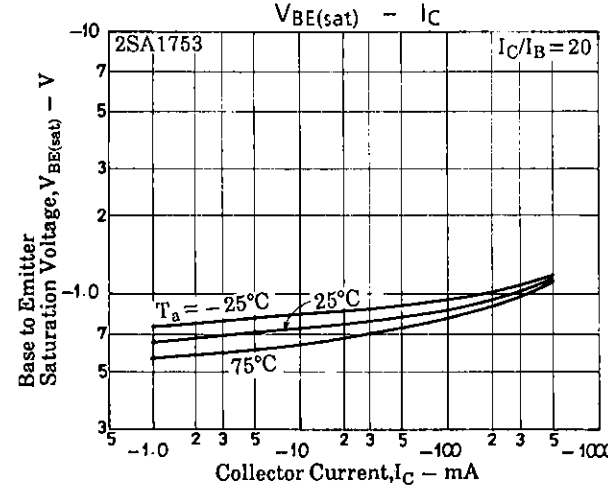
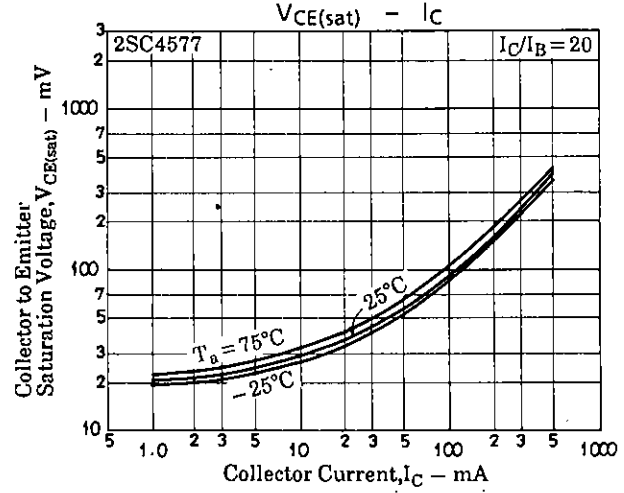
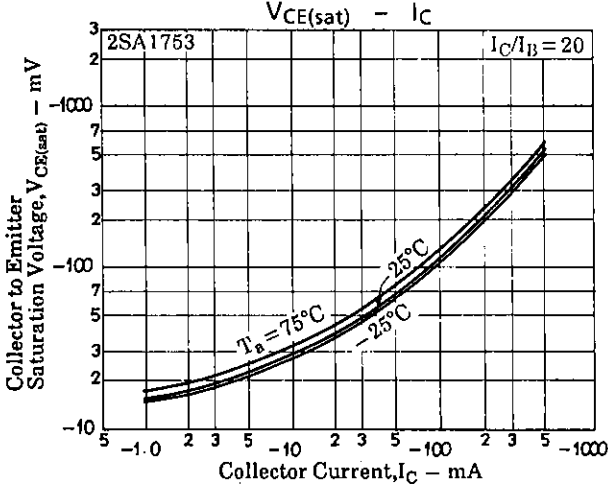
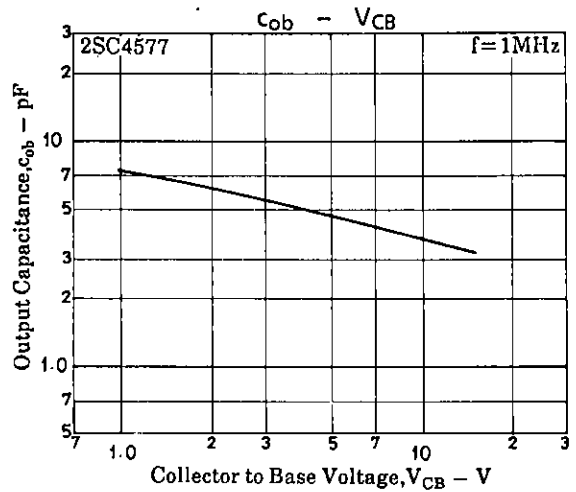
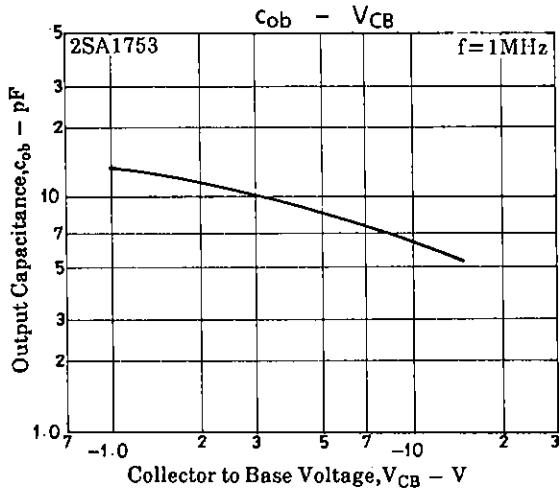
(unit : mm)



2SA1753/2SC4577



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