

No.3197

2SA1753/2SC4577

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_{CBO}	(-)20	V
Collector to Emitter Voltage	V_{CEO}	(-)15	V
Emitter to Base Voltage	V_{EBO}	(-)5	V
Collector Current	$I_{\mathbf{C}}$	(-)500	mA
Collector Current(Pulse)	I_{CP}	(-)1	Α
Collector Dissipation	$P_{\mathbf{C}}$	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 to +150	$^{\circ}\mathrm{C}$

Electrical Characteristics	at $Ta = 25^{\circ}C$		min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)15V, I_E = 0$,	(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4V, I_C = 0$			(-)0.1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = (-)2V, I_{C} = (-)10mA$	135>	K	600%	× -
	$h_{FE}(2)$	$V_{CE} = (-)2V, I_{C} = (-)400mA$	(70)80			
Gain-Bandwidth Product	${ m f_T}$	$V_{CE} = (-)2V_{IC} = (-)50mA$		300		MHz
				(400)		
Output Capacitance	c_{ob}	$V_{CB} = (-)10V, f = 1MHz$		(6.5)4.0		рF
C-E Saturation Voltage	$V_{CE(sat)}(1)$	$I_C = (-)5mA, I_B = (-)0.5mA$		(-)15	(-35)30	mV
	$V_{CE(sat)}(2)$	$I_C = (-)200 \text{mA}, I_B = (-)10 \text{mA}$		160	300	mV
				(-200)	(-360)	
B-E Saturation Voltage	$V_{\mathrm{BE}(\mathrm{sat})}$	$I_C = (-)200 \text{mA}, I_B = (-)10 \text{mA}$		(-)0.95	(-)1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_{\rm C} = (-)10 \mu {\rm A}, I_{\rm E} = 0$	(-)20			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1 \text{mA}, R_{BE} = \infty$	(-)15			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_{\rm E} = (-)10\mu A, I_{\rm C} = 0$	(-)5			V

 $\ensuremath{\text{\#}}$: The 2SA1753/2SC4577 are classified by 10mA h_{FE} as follows :

ľ	135	5	270	200	6	400	300	7	600
L							L		

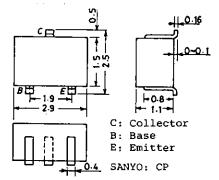
Marking 2SA1753:ES

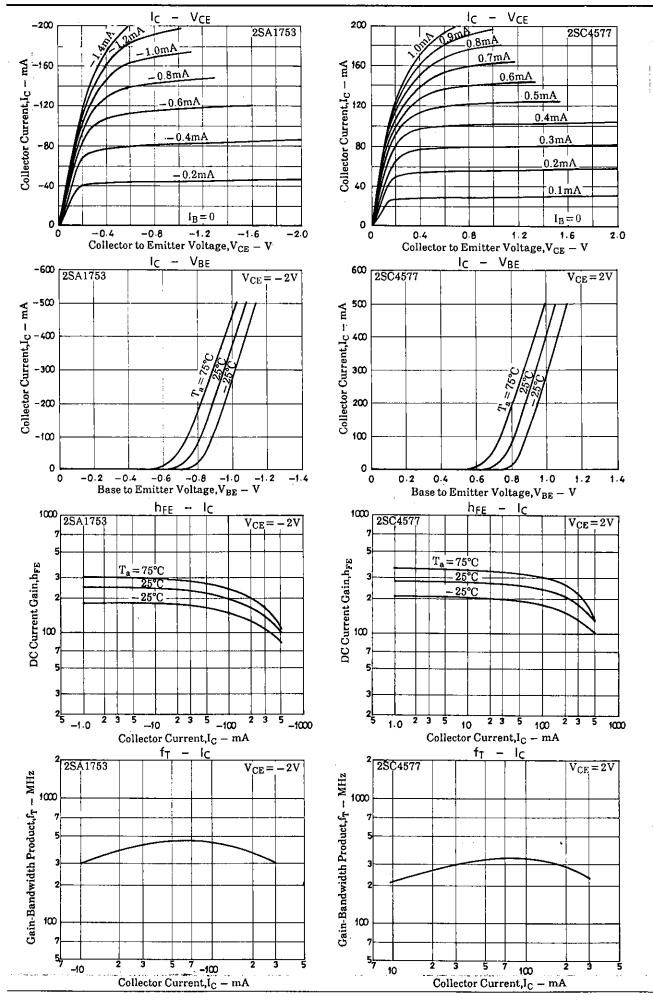
2SC4577: UT

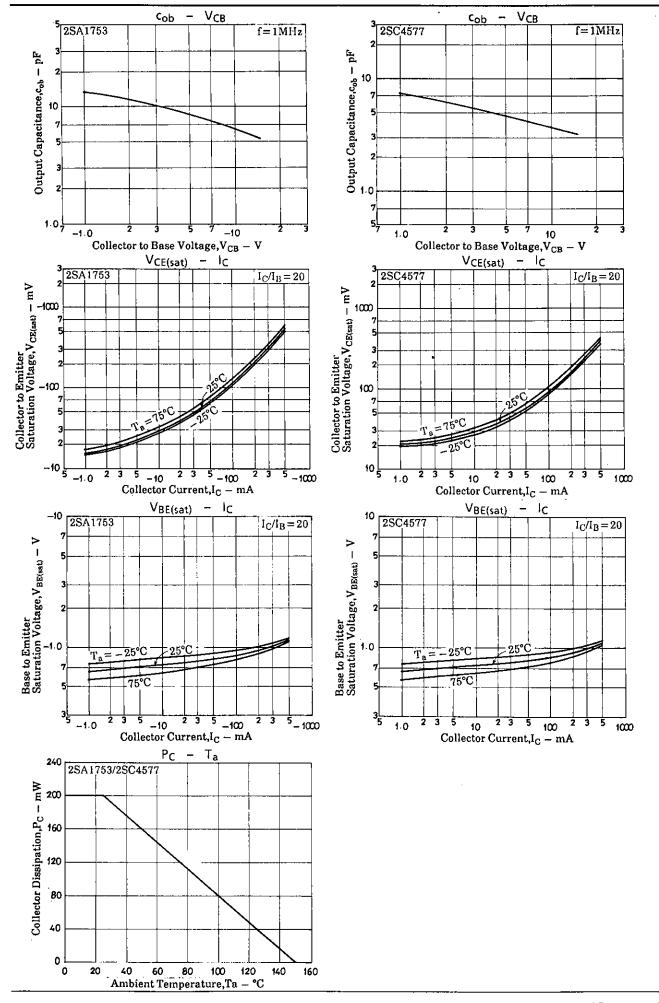
hFE rank: 5,6,7

Package Dimensions 2018A

(unit:mm)







- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guarant-eed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.