

SANYO

No.3187

2SA1745/2SC4555

PNP/NPN Epitaxial Planar Silicon Transistor
 Low-Frequency General-Purpose
 Amp Applications

Features

- Very small-sized package permitting the 2SA1745/2SC4555-applied sets to be made small and slim
- Low collector-to-emitter saturation voltage

() : 2SA1745

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V_{CB0}	(-)20	V
Collector to Emitter Voltage	V_{CEO}	(-)15	V
Emitter to Base Voltage	V_{EBO}	(-)5	V
Collector Current	I_C	(-)500	mA
Collector Current(Pulse)	I_{CP}	(-)1	A
Collector Dissipation	P_C	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

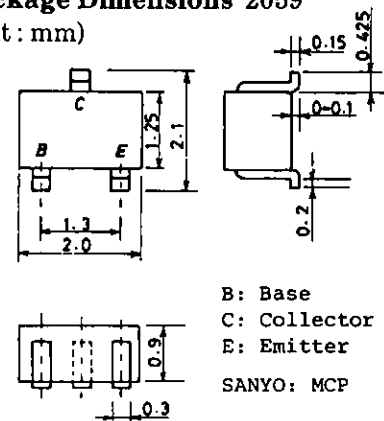
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)15V, I_E = 0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4V, I_C = 0$			(-)0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-)2V, I_C = (-)10mA$	135*		600*	
	$h_{FE(2)}$	$V_{CE} = (-)2V, I_C = (-)400mA$	(70)80			
Gain-Bandwidth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

*: The 2SA1745/2SC4555 are classified by 10mA h_{FE} as follows:

135 5 270	200 6 400	300 7 600
-----------	-----------	-----------

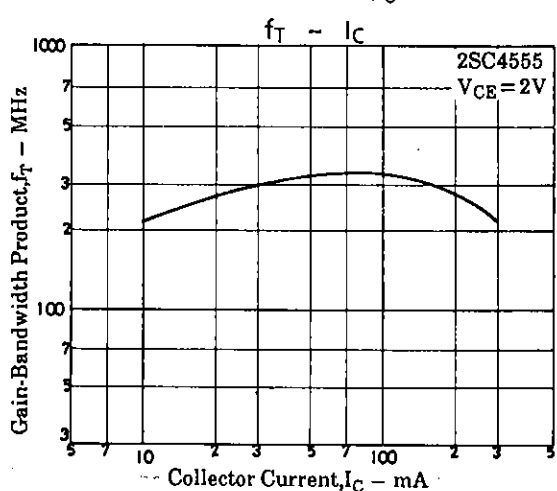
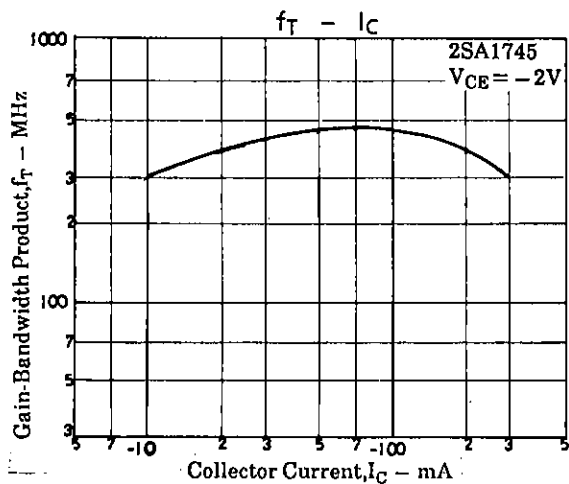
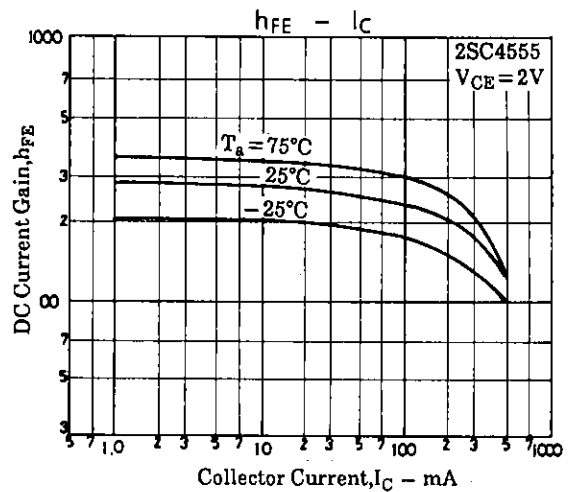
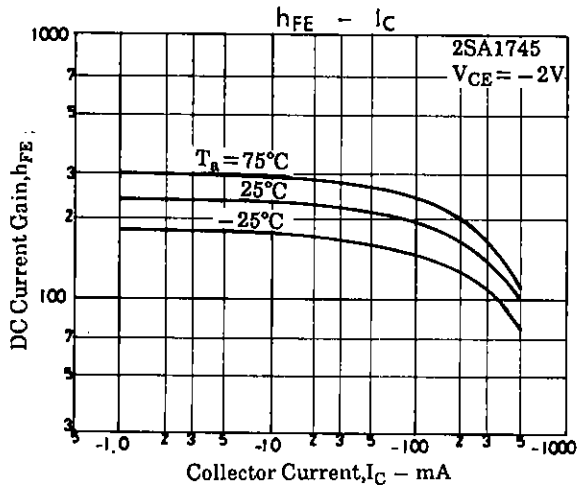
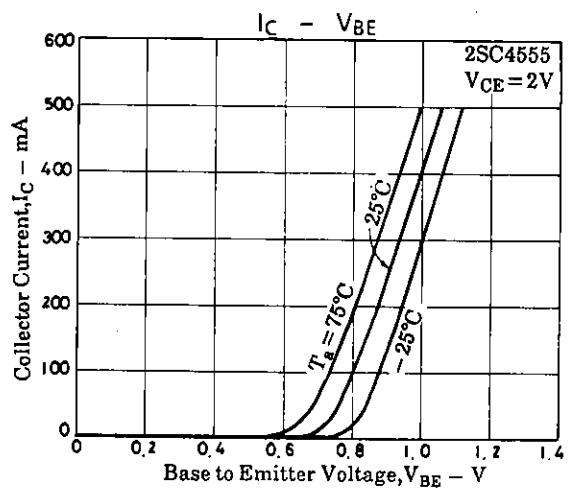
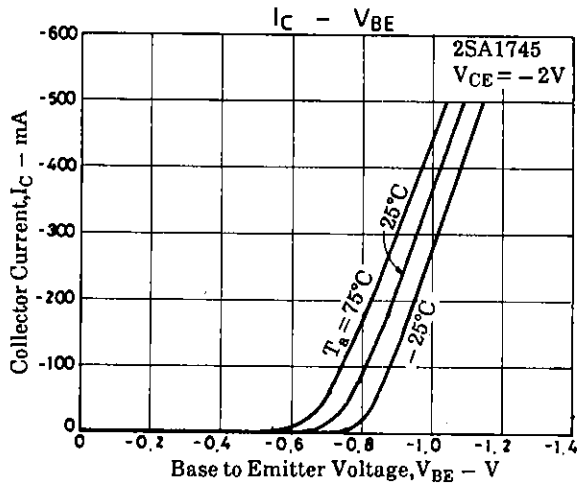
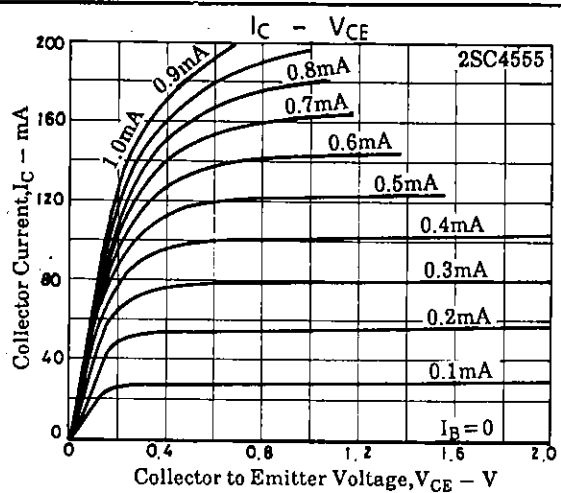
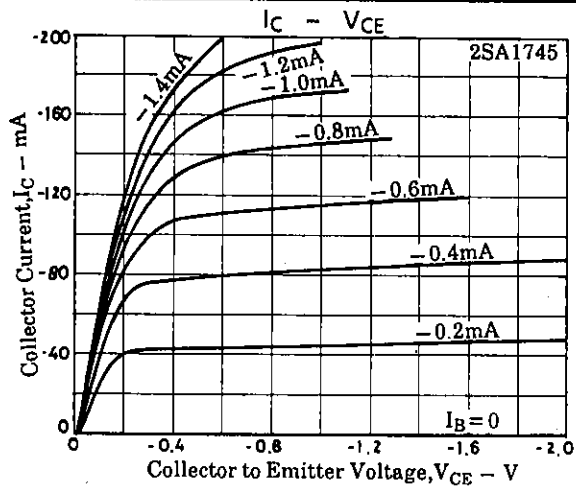
Marking 2SA1745 : ES
 2SC4555 : UT

h_{FE} rank : 5,6,7

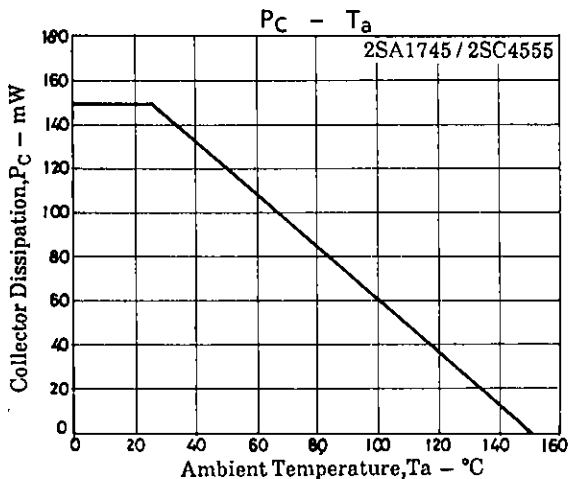
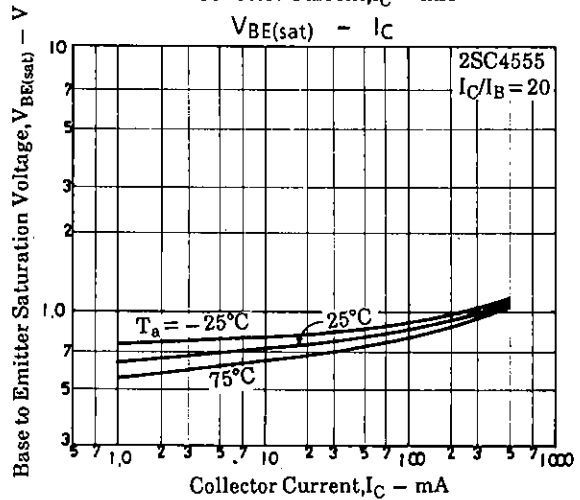
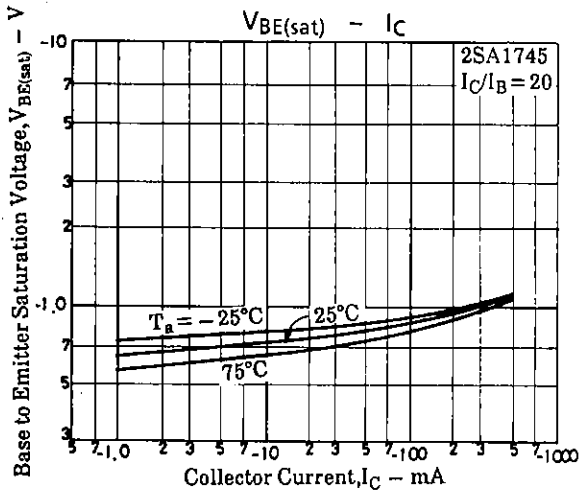
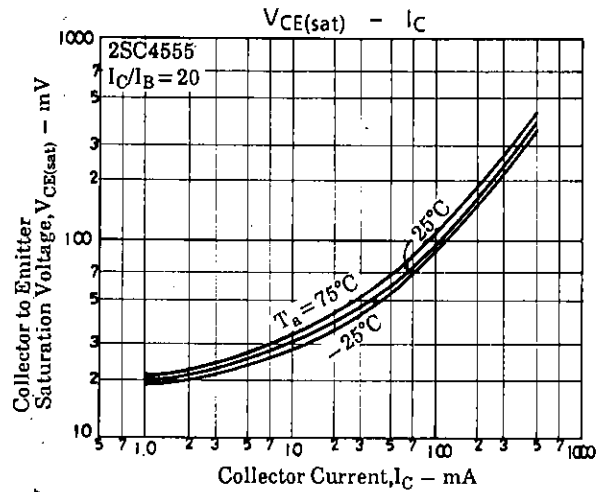
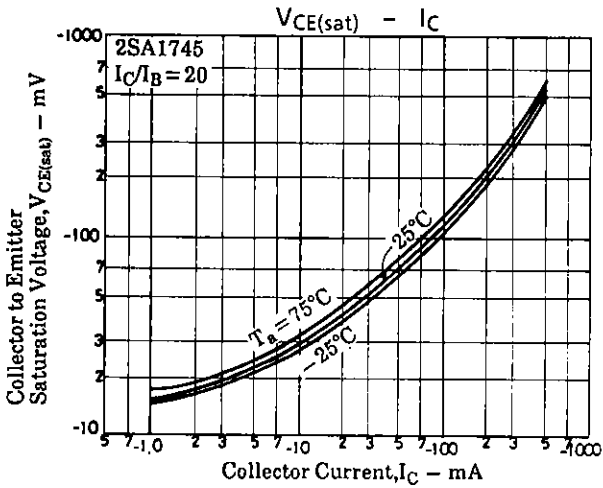
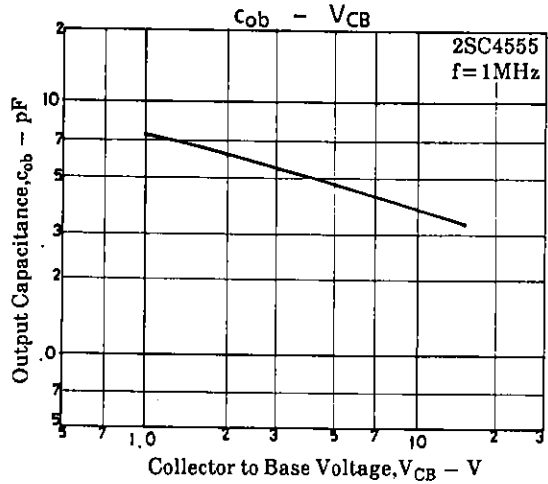
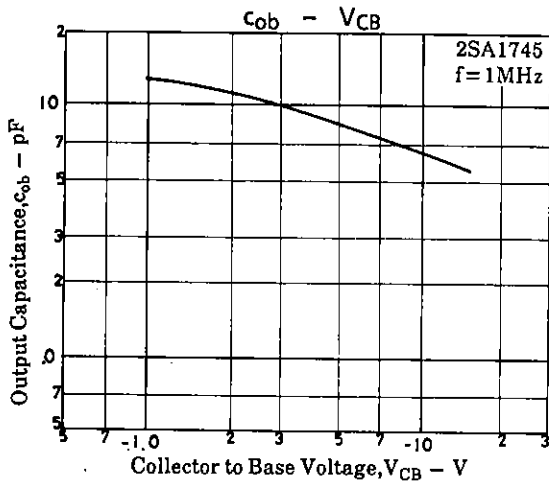
Package Dimensions 2059
(unit: mm)

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
 TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

2SA1745/2SC4555



2SA1745/2SC4555



- 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:
 - ① 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 guaranteed 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.