

2SA1745/2SC4555

Low-Frequency General-Purpose Amplifier Applications

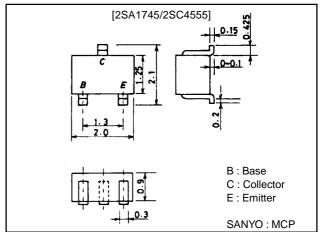
Features

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

Package Dimensions

unit:mm

2059



(): 2SA1745

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	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	IC		(-)500	mA
Collector Current (Pulse)	I _{CP}		(-)1	Α
Collector Dissipation	PC		150	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		Unit
Farameter	Symbol	Conditions	min	typ	max	Offic
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)15V, I _E =0			(–)0.1	μΑ
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(–)0.1	μΑ
DC Current Gain	h _{FE} 1	V _{CE} =(-)2V, I _C =(-)10mA	135*		600*	
	h _{FE2}	V _{CE} =(-)2V, I _C =(-)400mA	(70)80			
Gain-Bandwidth Product	f _T	V _{CE} =(-)2V, I _C =(-)50mA		300		MHz
				(400)		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)10V, f=1MHz		(6.5)		pF
				4.0		pF

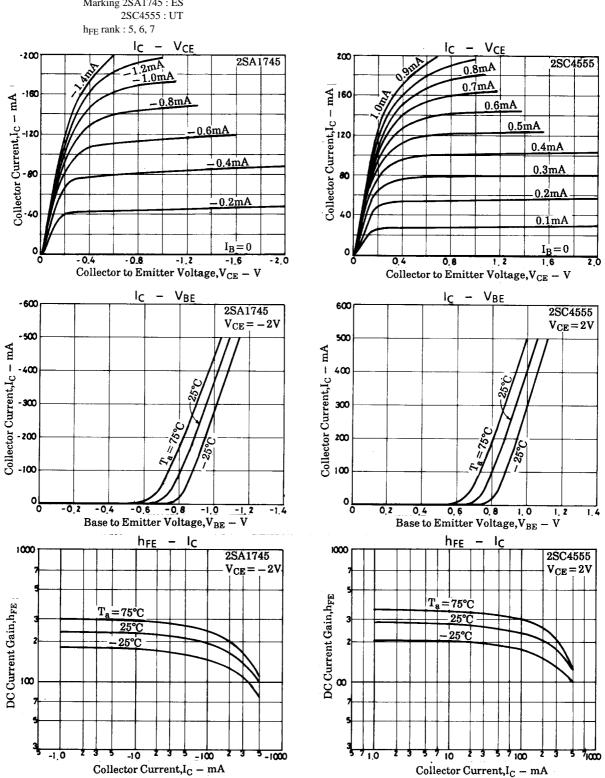
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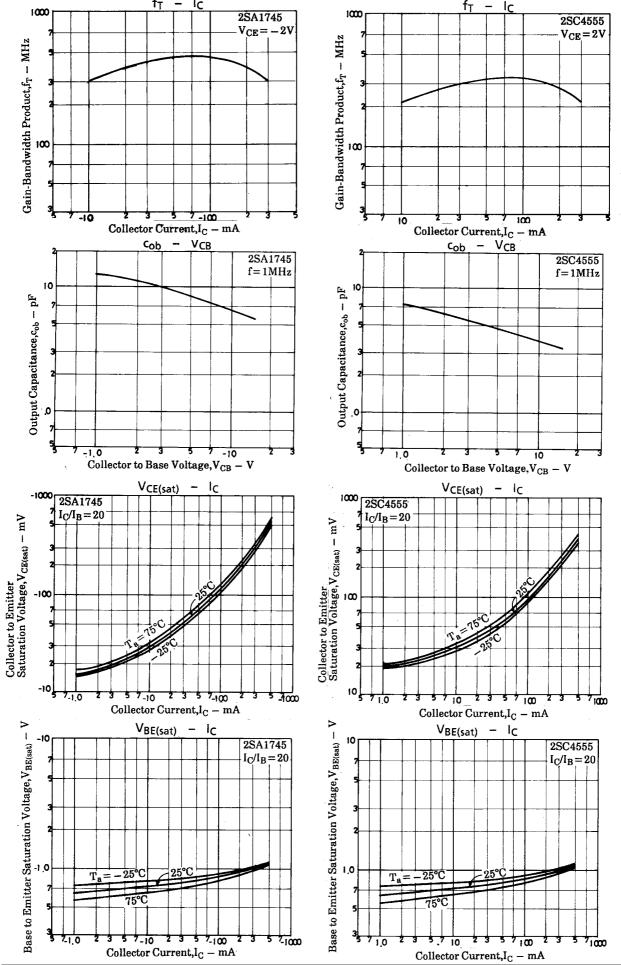
Parameter	Symbol	Conditions		Ratings		Unit
Farameter	Syllibol	Conditions	min	typ	max	Offic
Collector-to-Emitter Saturation Voltage	V _{CE(sat)} 1	I _C =(–)5mA, I _B =(–)0.5mA		(–)15	(–35) 30	mV
	V _{CE(sat)} ²	I _C =(-)200mA, I _B =(-)10mA		160	300	mV
				(–200)	(-360)	
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)200mA, I _B =(-)10mA		(-)0.95	(-)1.2	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =(-)10μA, I _E =0	(–)20			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =(-)1mA, R _{BE} =∞	(–)15			V
Emiiter-to-Base Breakdown Voltage	V(BR)EBO	I _E =(-)10μA, I _C =0	(–)5			V

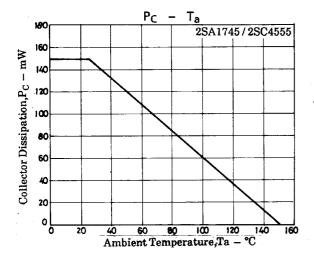
 $[\]mbox{*}$: The 2SA1745/2SC4555 are classified by 10mA \mbox{h}_{FE} as follows :

130 5 270 200 6 400 300 7 600

Marking 2SA1745 : ES







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