



2SC5155

Low-Frequency General-Purpose Amplifier, Applications

Applications

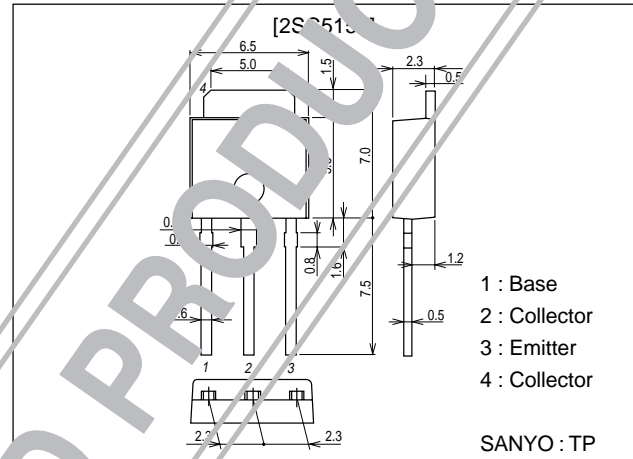
- Various drivers.

Features

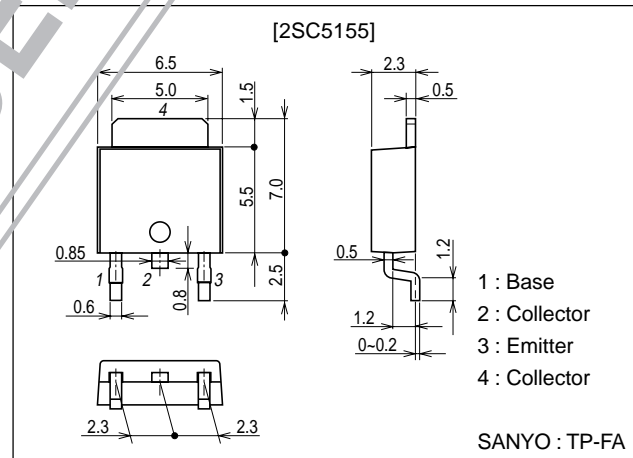
- High current capacity.
- Adoption of MBIT process.
- High DC current gain.
- Low collector-to-emitter saturation voltage.
- High V_{EBO} .

Package Dimensions

unit:mm
2045B



unit:mm
2045B



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Specifications

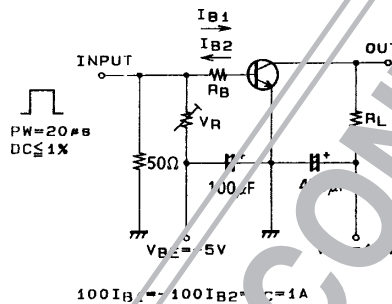
Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		50	V
Collector-to-Emitter Voltage	V _{CEO}		20	V
Emitter-to-Base Voltage	V _{EBO}		15	V
Collector Current	I _C		3	A
Collector Current (Pulse)	I _{CP}		6	A
Base Current	I _B		0.6	A
Collector Dissipation	P _C		1	W
		T _c =25°C	20	W
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

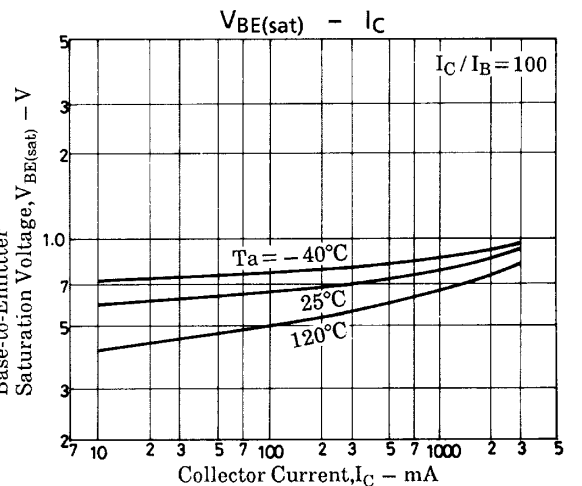
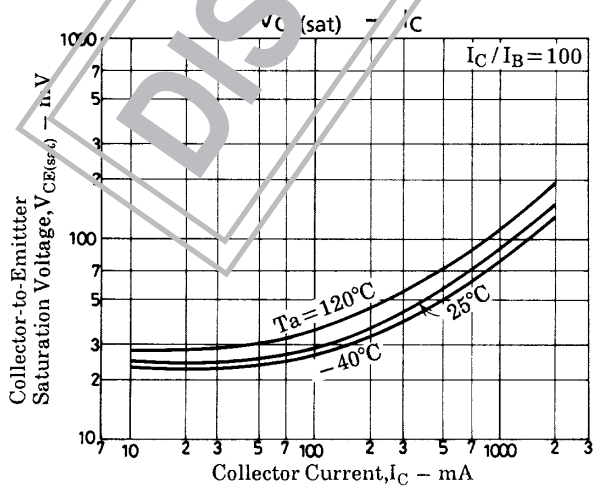
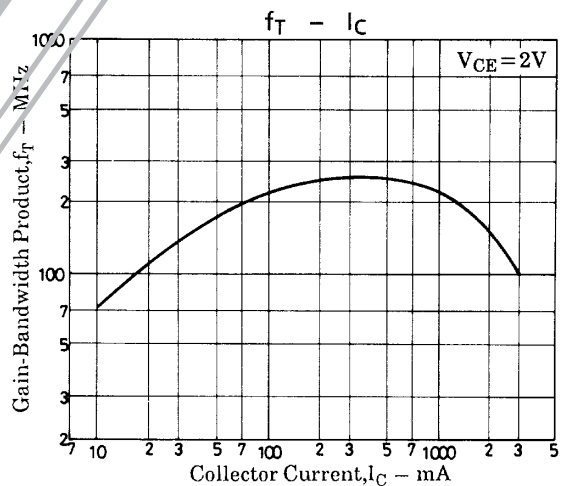
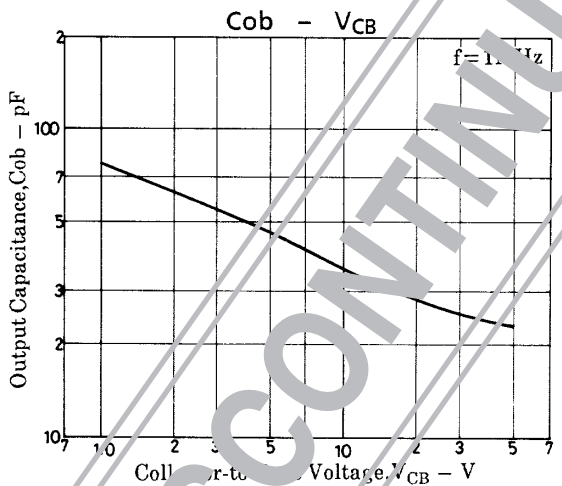
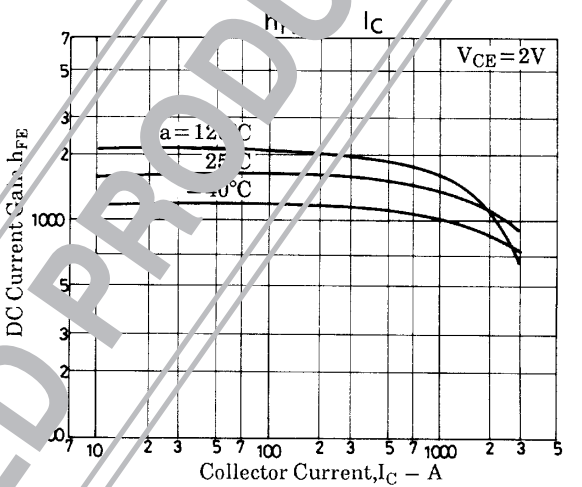
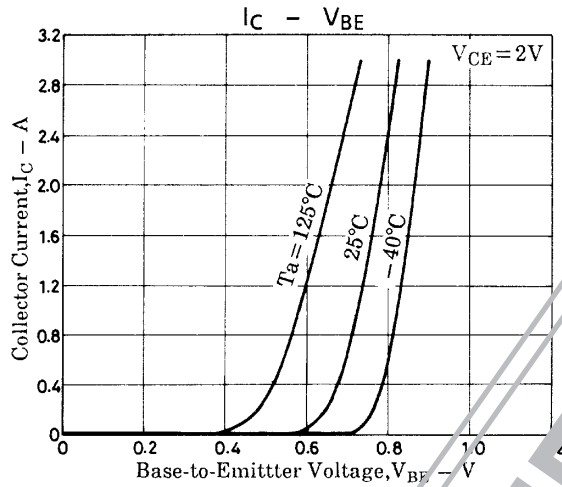
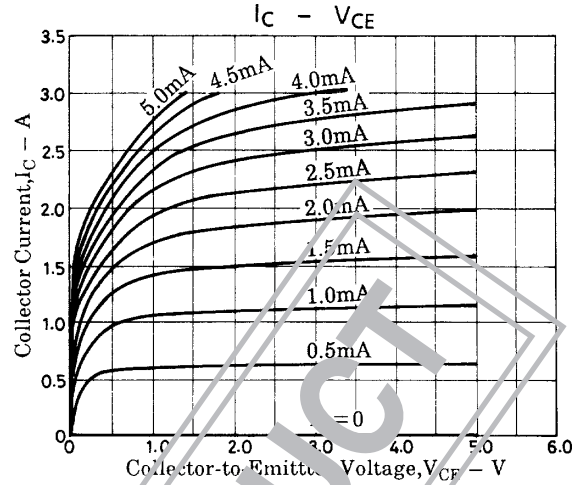
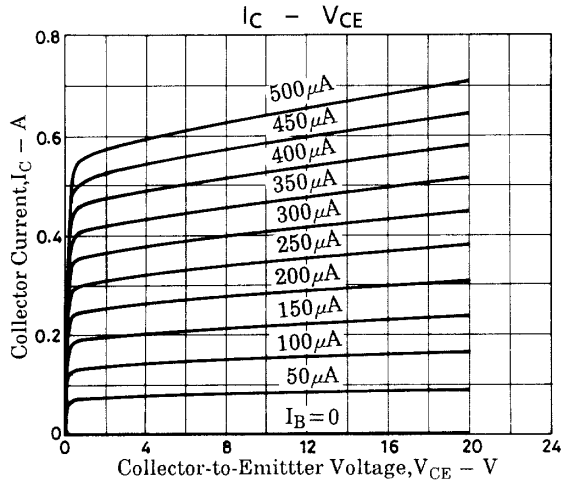
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =30V, I _E =0			100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} =10V, I _C =0			100	nA
DC Current Gain	h _{FE1}	V _{CE} =2V, I _C =500mA	800	1500	3200	
	h _{FE2}	V _{CE} =2V, I _C =2A	500			
Gain-Bandwidth Product	f _T	V _{CE} =2V, I _C =500mA		260		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, f=1MHz		35		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =2A, I _B =20mA		0.15	0.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =2A, I _B =20mA		0.85	1.2	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	50			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =1mA, R _{th(j-c)} =∞	20			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	15			V
Turn-ON Time	t _{on}	See specified Test Circuit		0.14		μs
Storage Time	t _{stg}	See specified Test Circuit		1.5		μs
Fall Time	t _f	See specified Test Circuit		0.12		μs

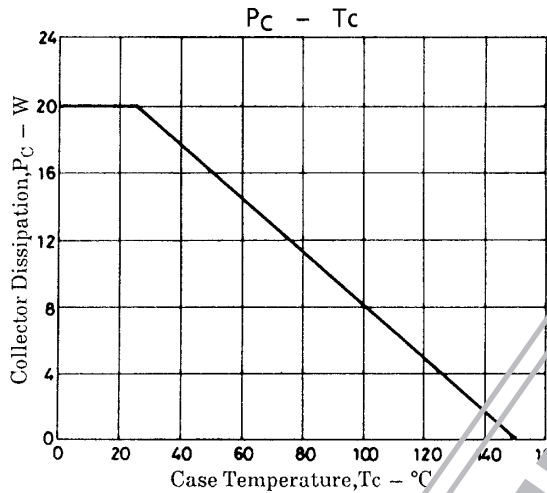
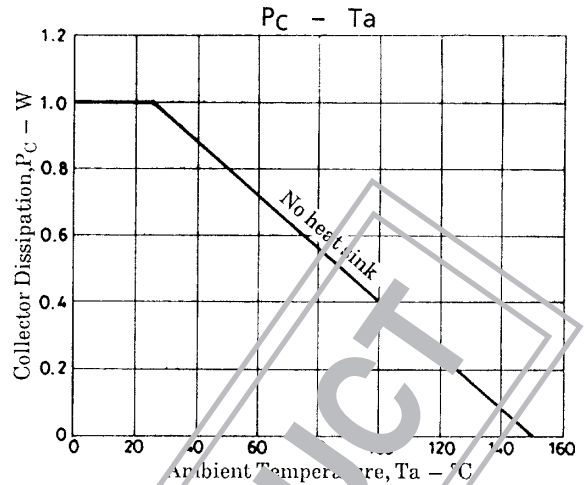
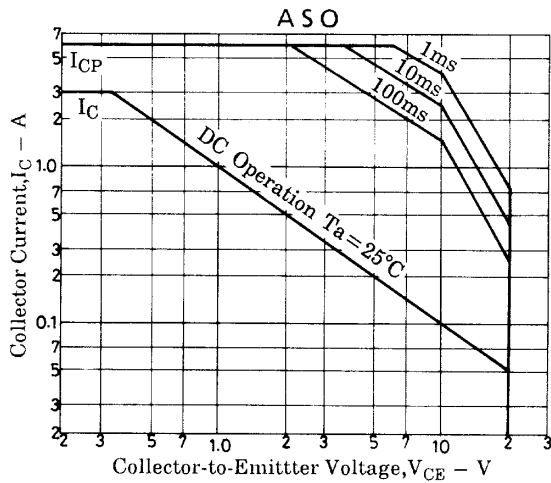
Switching Time Test Circuit



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