

SANYO

No.4802

2SC5155

NPN Epitaxial Planar Silicon Transistor

Low-Frequency

General-Purpose Amp Applications

Applications

- Various drivers.

Features

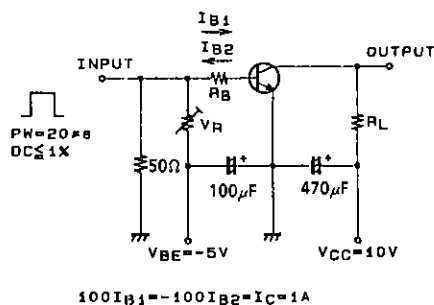
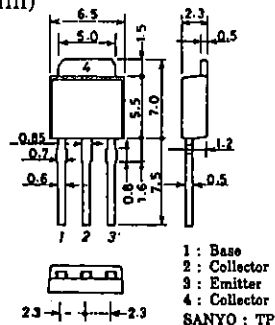
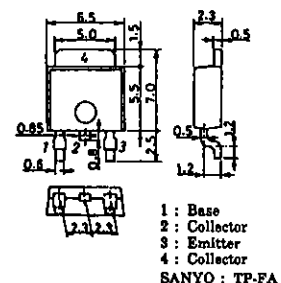
- High current capacity.
- Adoption of MBIT process.
- High DC current gain.
- Low collector-to-emitter saturation voltage.
- High V_{EBO} .

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

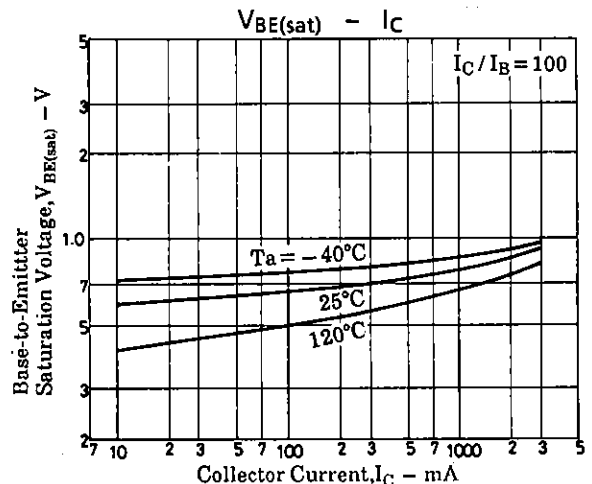
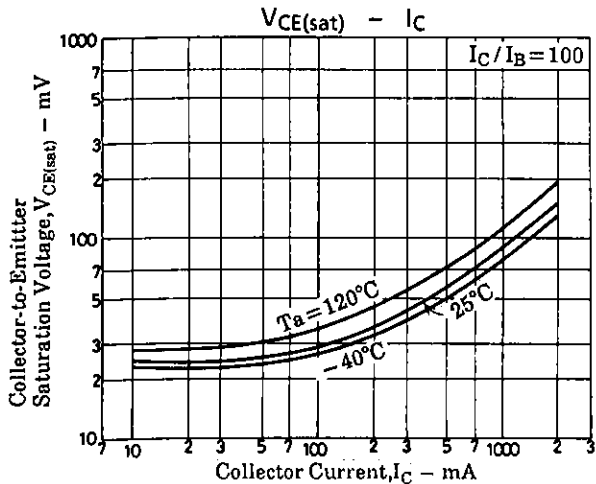
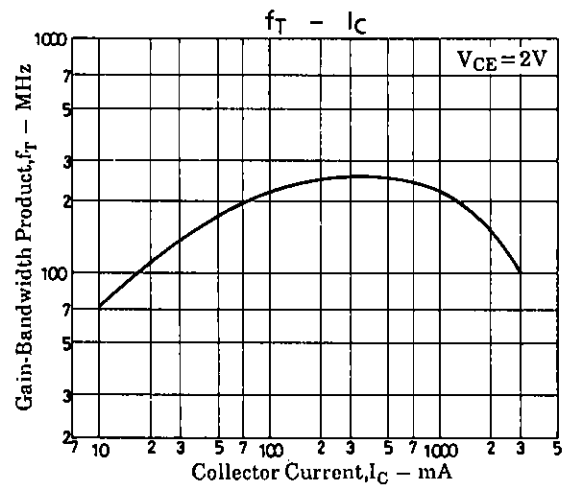
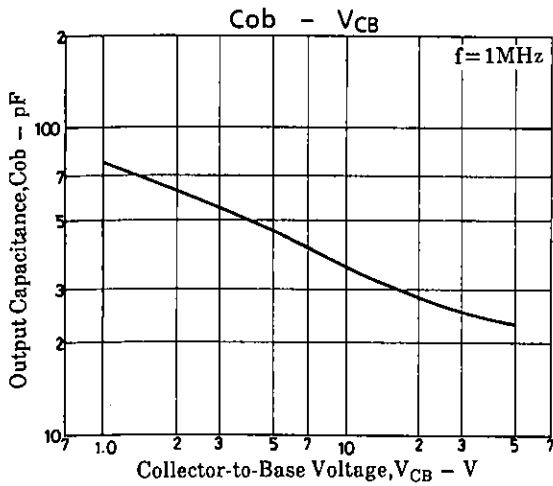
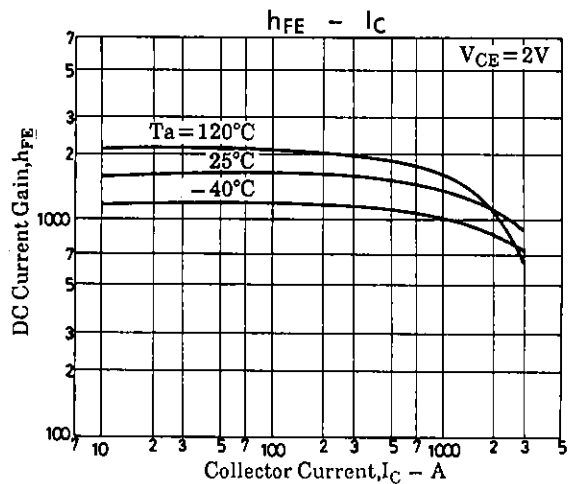
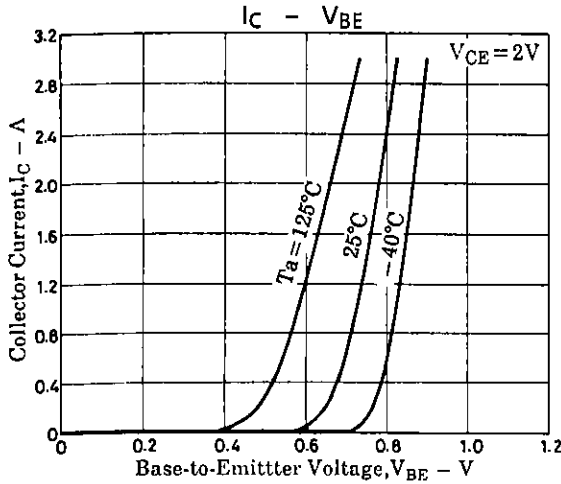
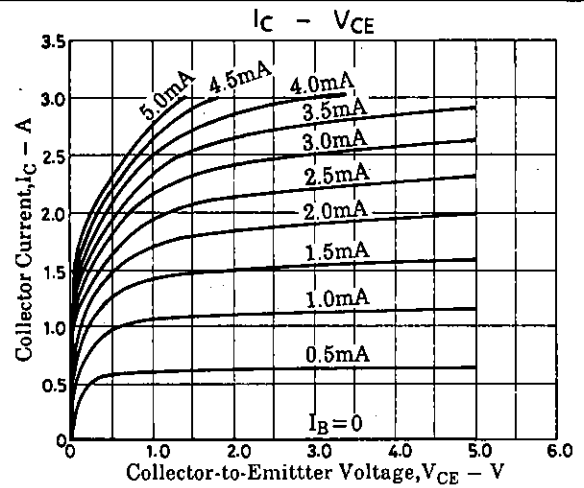
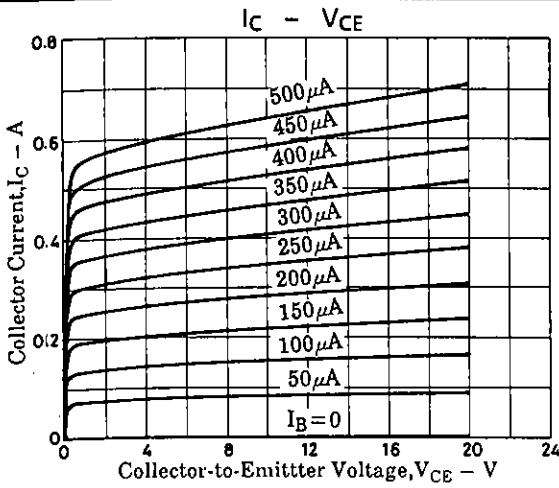
			unit
Collector-to-Base Voltage	V_{CB0}	50	V
Collector-to-Emitter Voltage	V_{CEO}	20	V
Emitter-to-Base Voltage	V_{EBO}	15	V
Collector Current	I_C	3	A
Collector Current (Pulse)	I_{CP}	6	A
Base Current	I_B	0.6	A
Collector Dissipation	P_C	1	W
		20	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

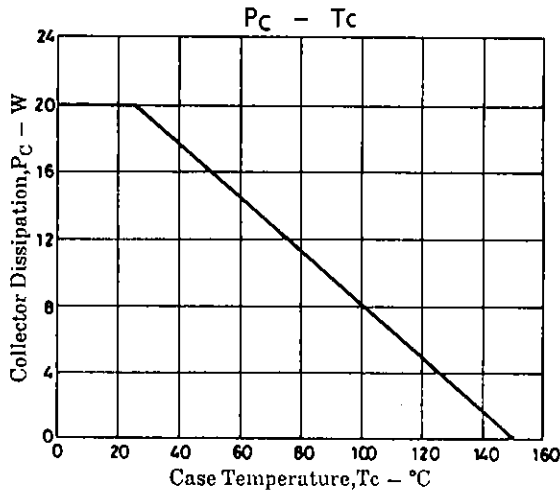
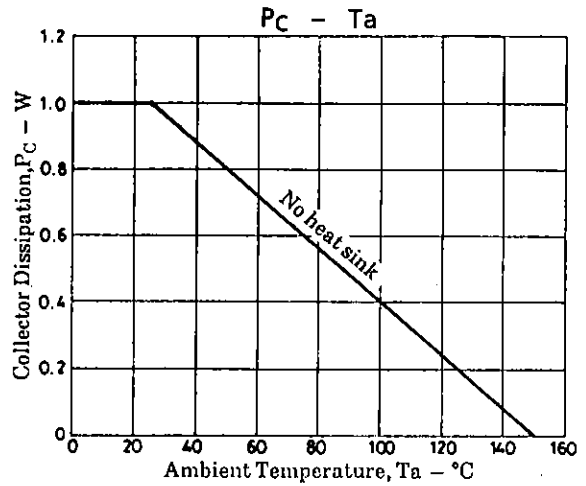
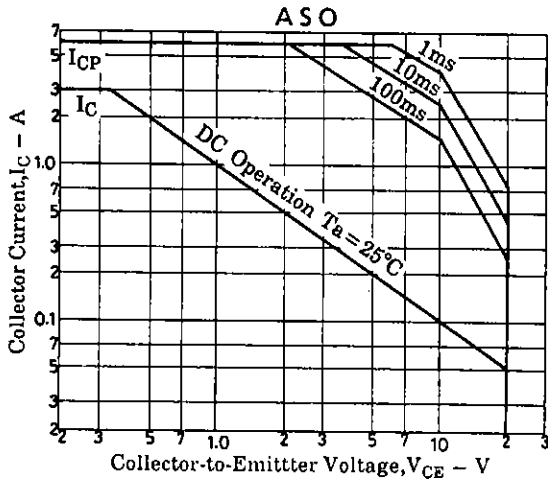
 $T_c = 25^\circ\text{C}$ **Electrical Characteristics at $T_a = 25^\circ\text{C}$**

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 30\text{V}, I_E = 0$			100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 10\text{V}, I_C = 0$			100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	800	1500	3200	
	$h_{FE(2)}$	$V_{CE} = 2\text{V}, I_C = 2\text{A}$	500			
Gain-Bandwidth Product	f_T	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$		260		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		35		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}, I_B = 20\text{mA}$	0.15	0.5		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 2\text{A}, I_B = 20\text{mA}$	0.85	1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	50			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, R_{BE} = \infty$	20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	15			V
Turn-ON time	t_{on}	See specified Test Circuit.		0.14		μs
Storage Time	t_{stg}	"		1.5		μs
Fall Time	t_f	"		0.12		μs

Switching Time Test Circuit**Package Dimensions 2045A**
(unit: mm)**Package Dimensions 2044A**
(unit: mm)

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