

SANYO	No.946G	2SC3071
		NPN Epitaxial Planar Silicon Transistor High h_{FE} , Low-Frequency General-Purpose Amp Applications

Applications

- Low-frequency general-purpose amplifiers, various drivers, muting circuits.

Features

- High DC current gain ($h_{FE} = 500$ to 2000).
- High breakdown voltage ($V_{CEO} \geq 100V$).
- Low collector-to-emitter saturation voltage ($V_{CE(sat)} \leq 0.5V$).
- High V_{EBO} ($V_{EBO} \geq 15V$).

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

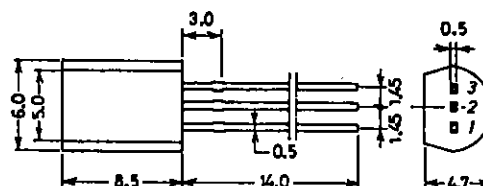
			unit
Collector-to-Base Voltage	V_{CBO}	120	V
Collector-to-Emitter Voltage	V_{CEO}	100	V
Emitter-to-Base Voltage	V_{EBO}	15	V
Collector Current	I_C	200	mA
Collector Current (Pulse)	I_{CP}	300	mA
Base Current	I_B	40	mA
Collector Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

Electrical Characteristics at $T_a = 25^\circ C$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 80V, I_E = 0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 10V, I_C = 0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5V, I_C = 10mA$	500		2000	
	$h_{FE(2)}$	$V_{CE} = 5V, I_C = 100mA$	400			
Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 10mA$		150		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, f = 1MHz$		6.5		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 2mA$		0.15	0.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 100mA, I_B = 2mA$		0.85	1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	120			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	100			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	15			V

Package Dimensions 2006B

(unit : mm)



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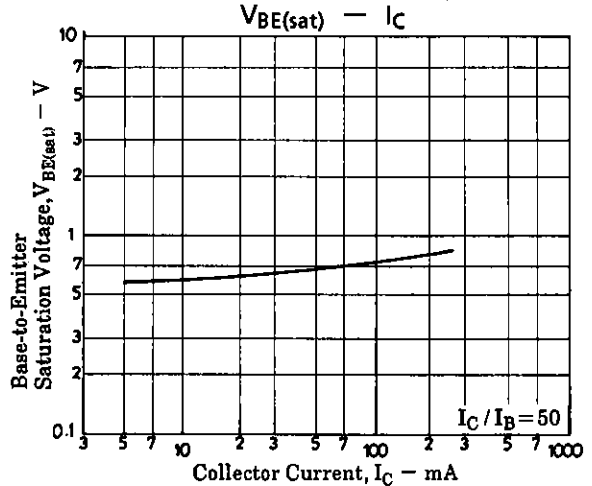
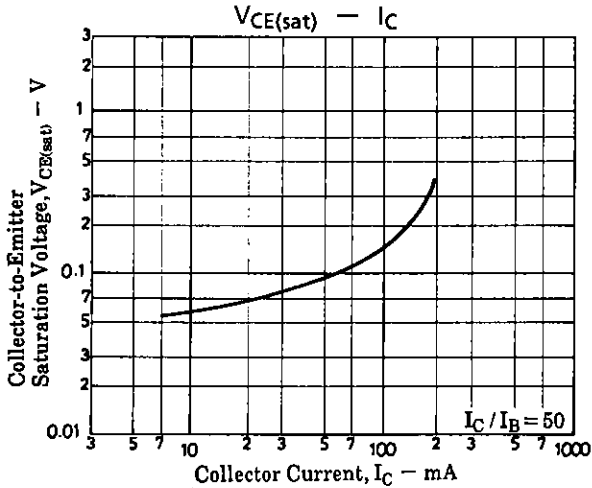
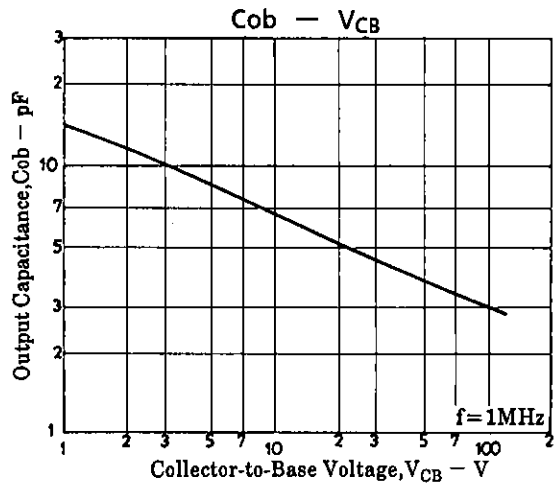
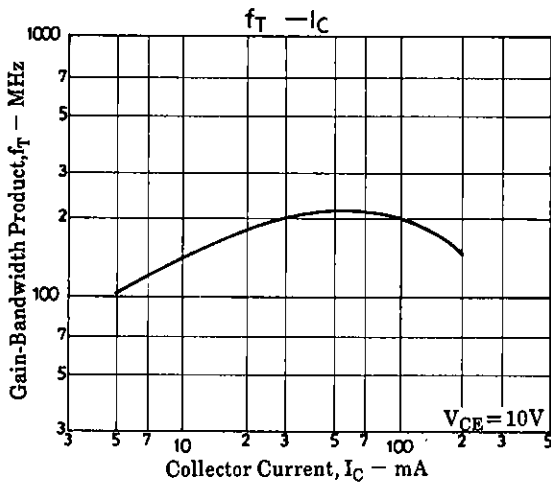
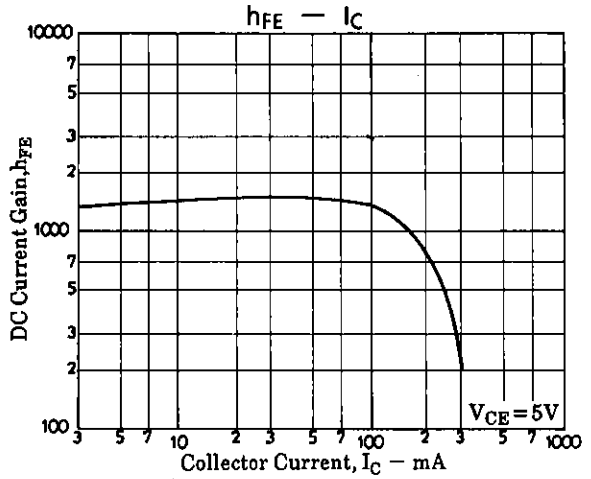
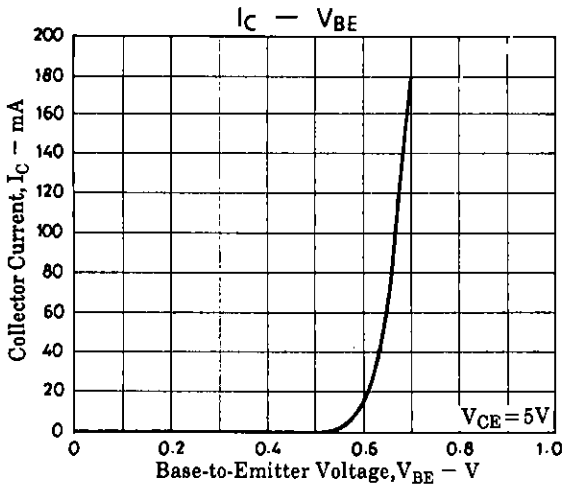
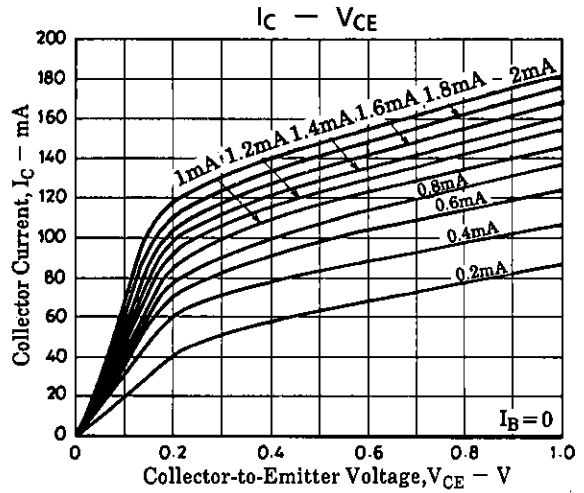
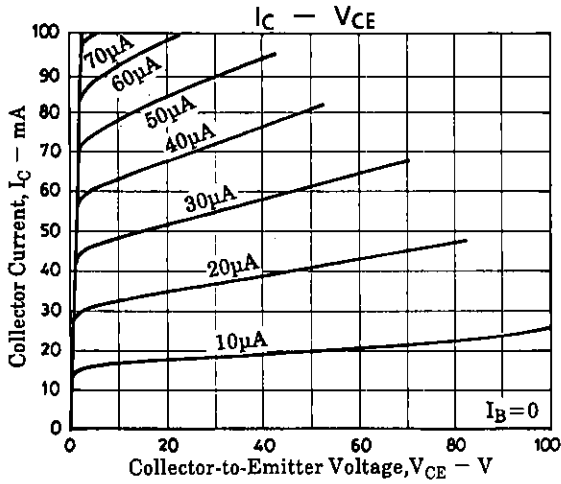
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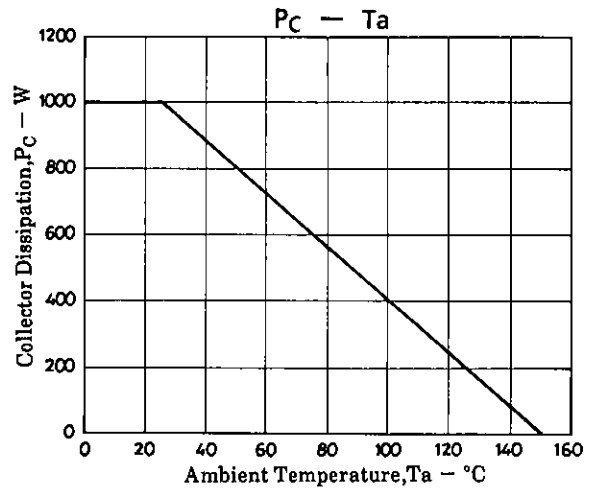
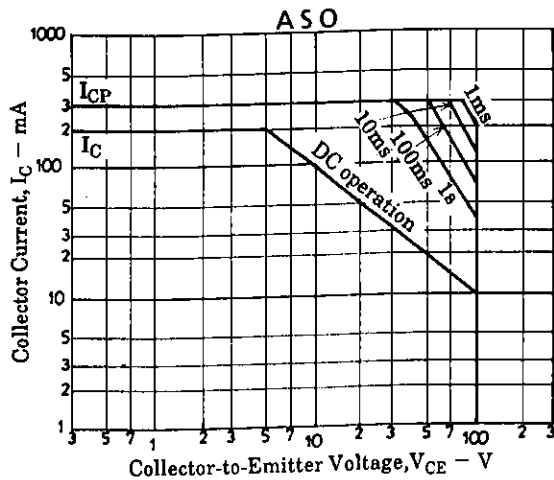
1: Emitter
2: Collector
3: Base

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