



No.923G

2SC3070

NPN Epitaxial Planar Silicon Transistor

High h_{FE} , Low-Frequency
General-Purpose Amp Applications

Applications

- Low-frequency, general-purpose amp., various drivers, muting circuit

Features

- High DC current gain ($h_{FE}=800$ to 3200)
- Large Current capacity ($I_C=1.2A$)
- Low collector-to-emitter saturation voltage ($V_{CE(sat)}=0.5V$ max.)
- High $VEBO$ ($VEBO \geq 15V$)

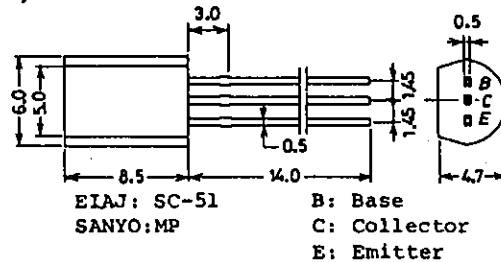
Absolute Maximum Ratings/ $T_a=25^\circ C$

			unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	$VEBO$	15	V
Collector Current	I_C	1.2	A
Collector Current(Pulse)	I_{CP}	2	A
Base Current	I_B	240	mA
Collector Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

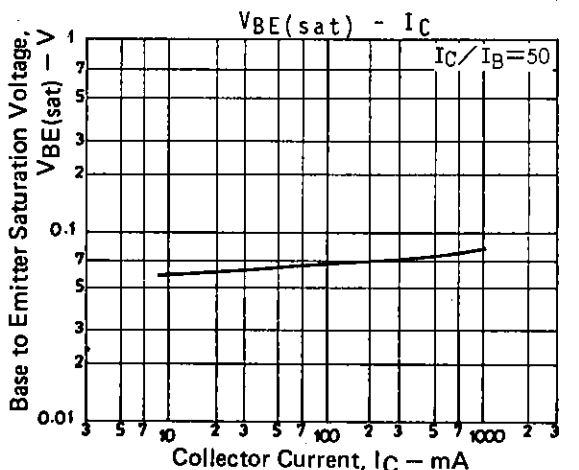
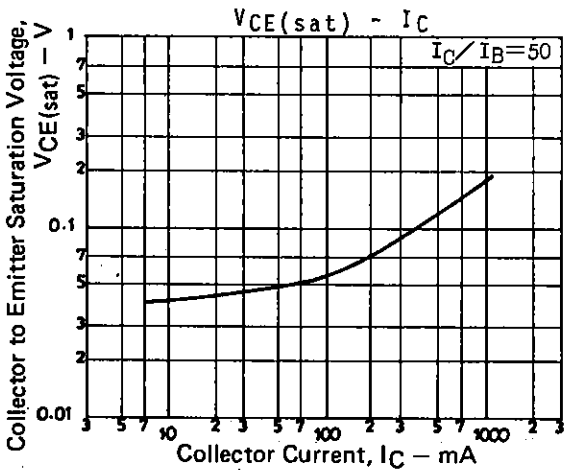
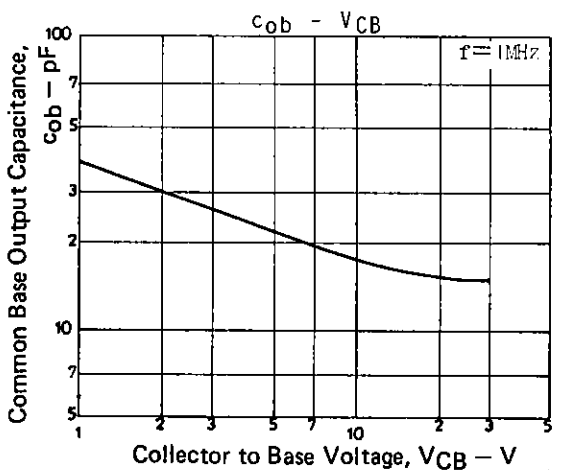
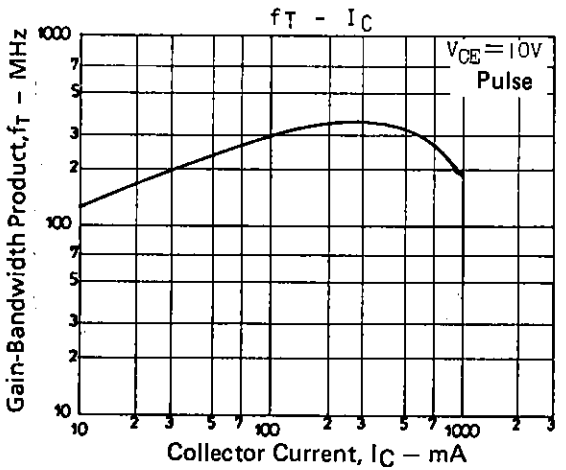
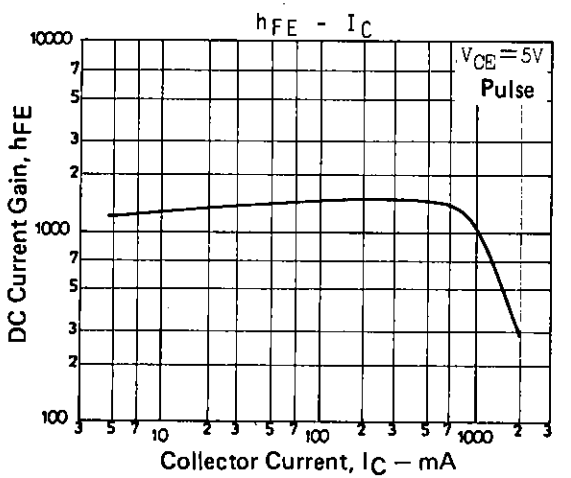
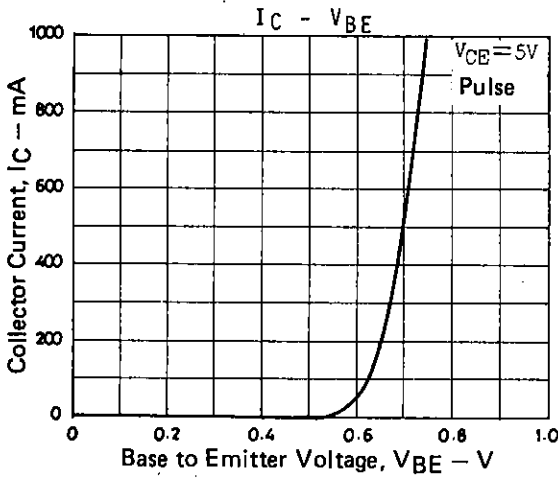
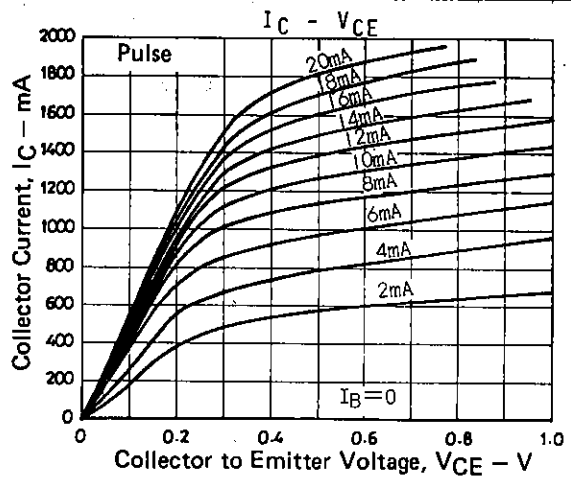
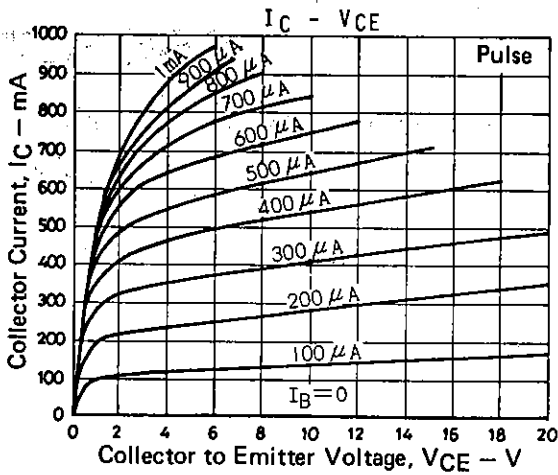
Electrical Characteristics/ $T_a=25^\circ C$

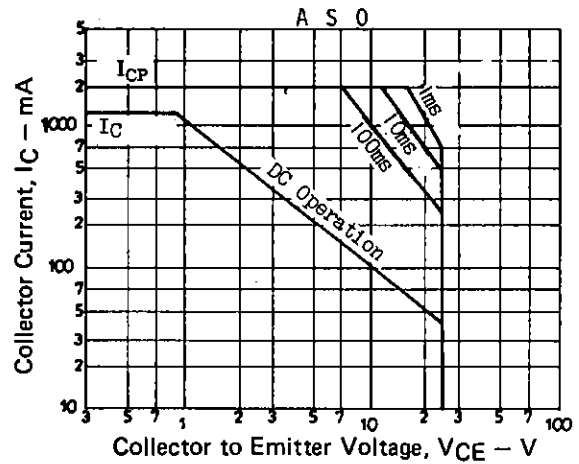
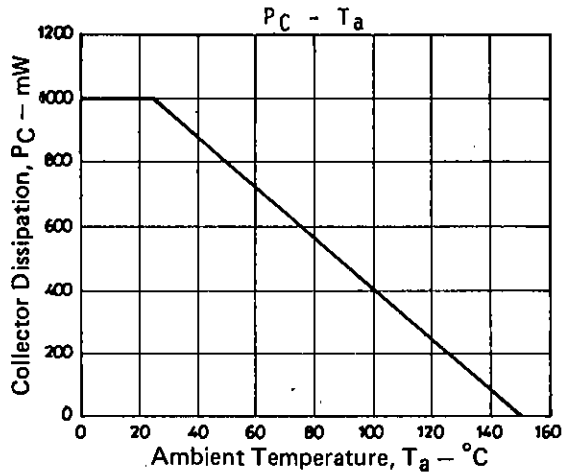
			min	typ	max	unit
Collector Cut-off Current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=10V, I_C=0$			0.1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5V, I_C=500mA$	800	1500	3200	
	$h_{FE}(2)$	$V_{CE}=5V, I_C=10mA$	600			
Gain-bandwidth product	f_T	$V_{CE}=10V, I_C=50mA$		220		MHz
Common Base Output Capacitance	c_{ob}	$V_{CB}=10V, f=1MHz$		17		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=10mA$		0.12	0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=10mA$		0.85	1.2	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	25			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	15			V

Package Dimensions 2006A
(unit: mm)



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





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