



No.1779A

2SC3651

NPN Epitaxial Planar Silicon Transistor

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

Applications

- . LF amp, various drivers, muting circuit

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} ($V_{EBO} \geq 15V$)
- . Very small size making it easy to provide high-density, small-sized hybrid IC's.

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
Collector Dissipation	P_C	500	mW
	P_C^*	1.3	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

* Mounted on ceramic board (250mm²x0.8mm)

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

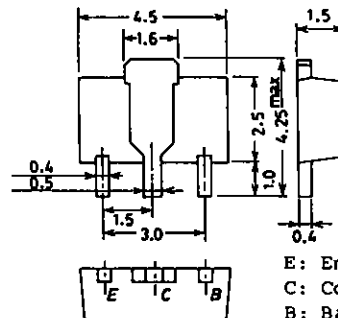
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=80V, I_E=0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=10V, I_C=0$			0.1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5V, I_C=10mA$	500	1000	2000	
	$h_{FE}(2)$	$V_{CE}=5V, I_C=100mA$	400			
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=10mA$		150		MHz
Output Capacitance	c_{ob}	$V_{CB}=10V, f=1MHz$		6.5		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=2mA$	0.15	0.5		V

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Marking: CG

Package Dimensions 2038

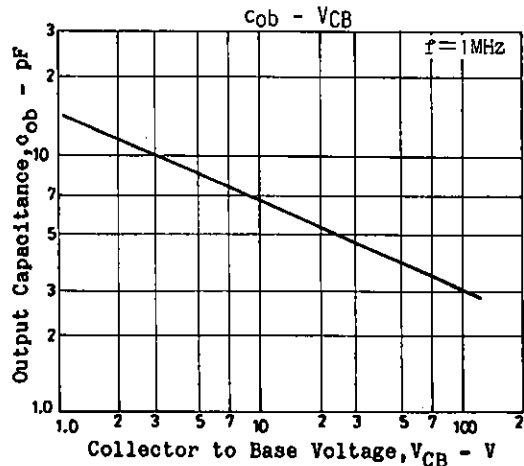
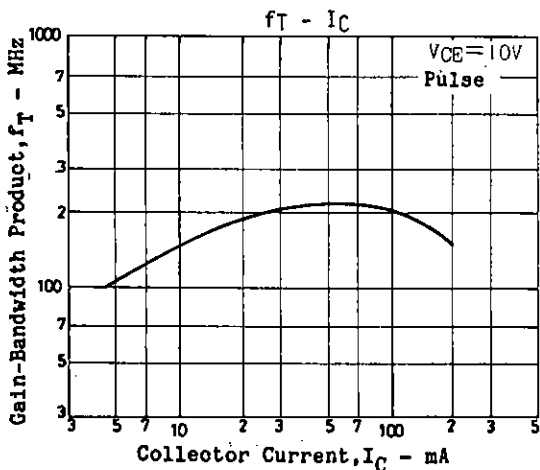
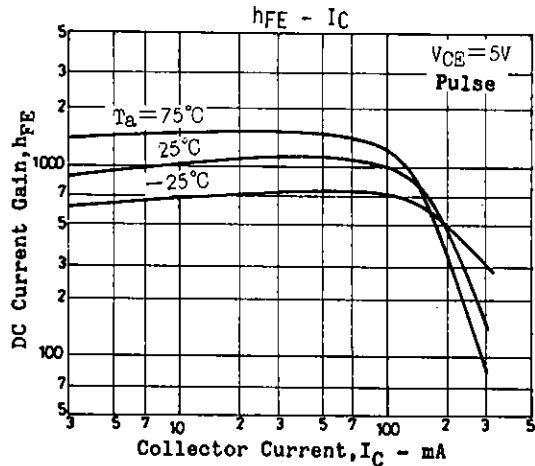
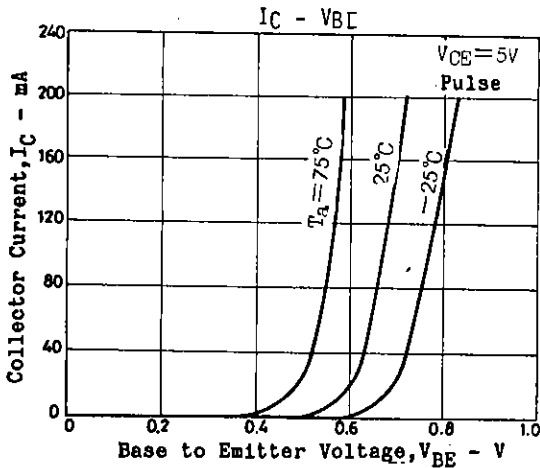
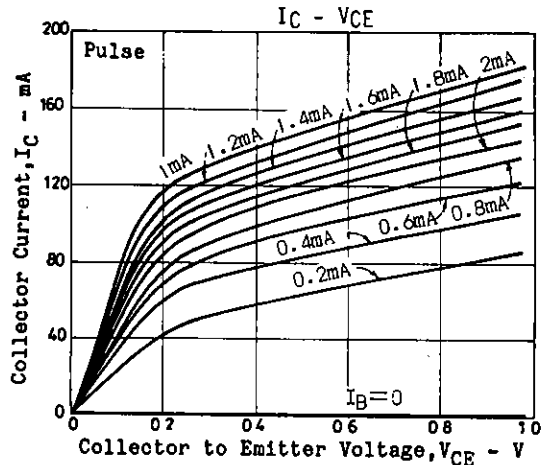
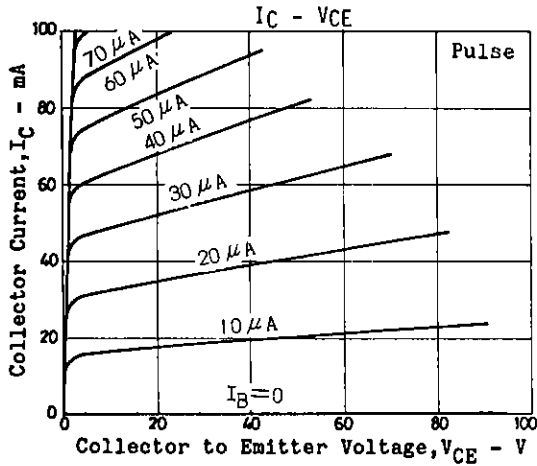
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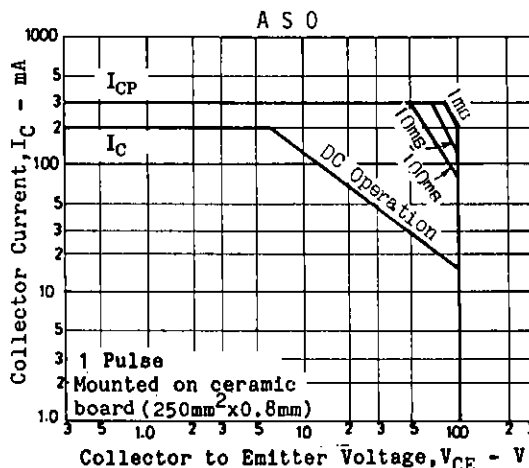
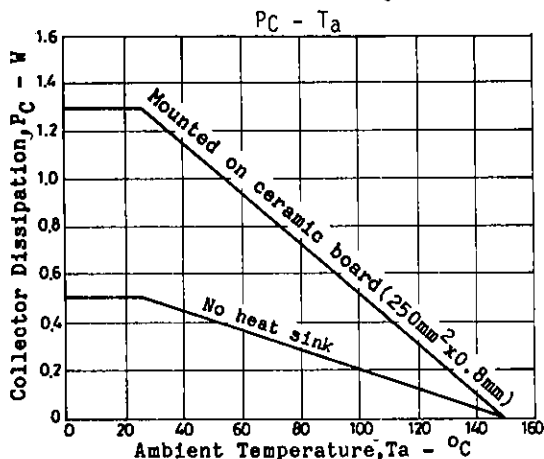
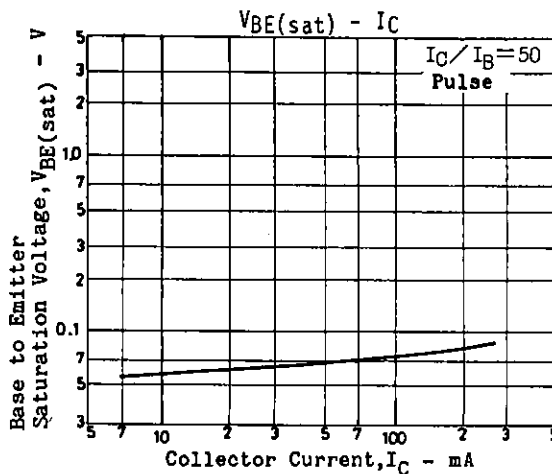
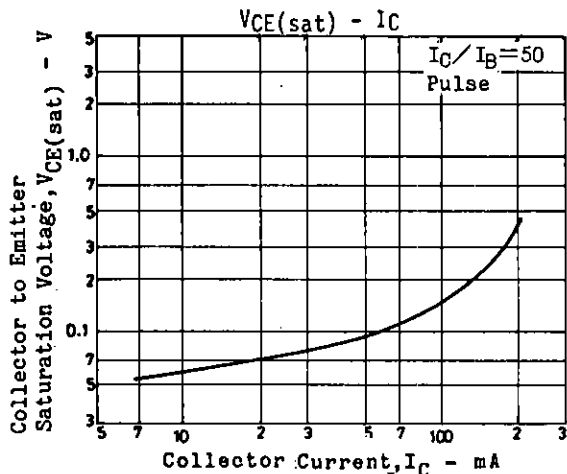


E: Emitter
C: Collector
B: Base
SANYO: PCP
(Bottom View)

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			min	typ	max	unit
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_E=2mA$	0.85	1.2		V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	120			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	100			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	15			V





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