



SANYO Semiconductors

DATA SHEET

2SA2210 — PNP Epitaxial Planar Silicon Transistor

High-Current Switching Applications

Applications

- Relay drivers, lamp drivers, motor drivers.

Features

- Adoption of MBIT processes.
- Large current capacitance.
- Low collector-to-emitter saturation voltage.
- High-speed switching.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		-50	V
Collector-to-Emitter Voltage	V _{CEO}		-50	V
Emitter-to-Base Voltage	V _{EBO}		-6	V
Collector Current	I _C		-20	A
Collector Current (Pulse)	I _{CP}		-25	A
Base Current	I _B		-3	A
Collector Dissipation	P _C		2	W
		T _C =25°C	30	W
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

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SANYO Semiconductor Co., Ltd.

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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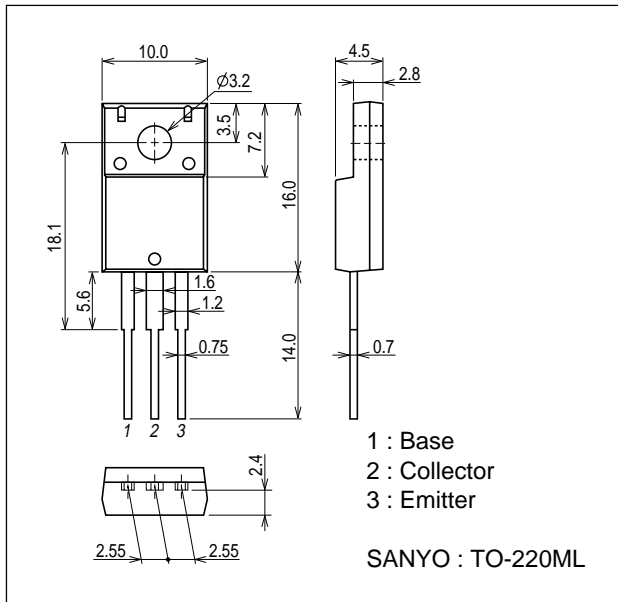
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	V _{CB} =-40V, I _E =0A			-10	μA
Emitter Cutoff Current	IEBO	V _{EB} =-4V, I _C =0A			-10	μA
DC Current Gain	h _{FE}	V _{CE} =-2V, I _C =-1A	150		450	
Gain-Bandwidth Product	f _T	V _{CE} =-10V, I _C =-1A		140		MHz
Output Capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		215		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =-7A, I _B =-350mA		-200	-500	mV
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =-7A, I _B =-350mA			-1.2	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0A	-50			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =-1mA, R _{BE} =∞	-50			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0A	-6			V
Turn-ON Time	t _{on}	See specified Test Circuit.		60		ns
Storage Time	t _{stg}	See specified Test Circuit.		270		ns
Fall Time	t _f	See specified Test Circuit.		20		ns

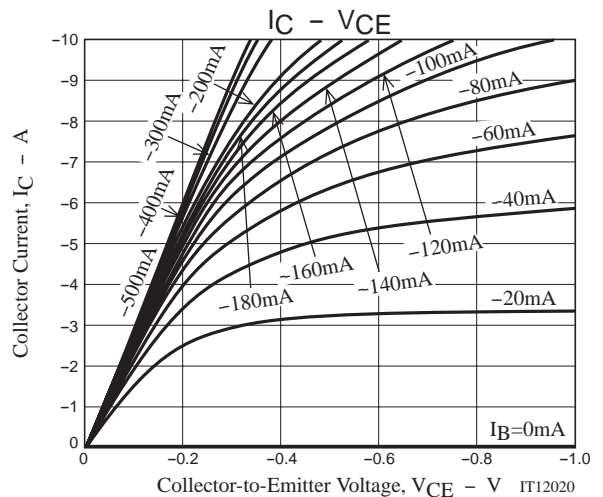
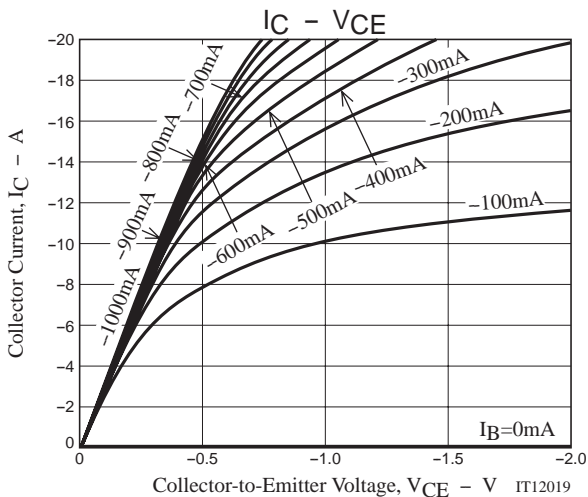
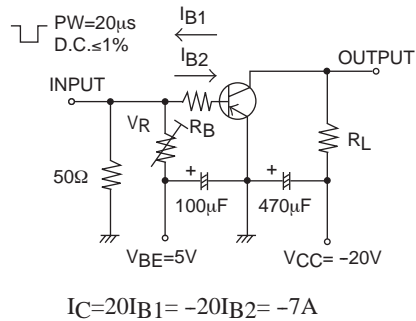
Package Dimensions

unit : mm (typ)

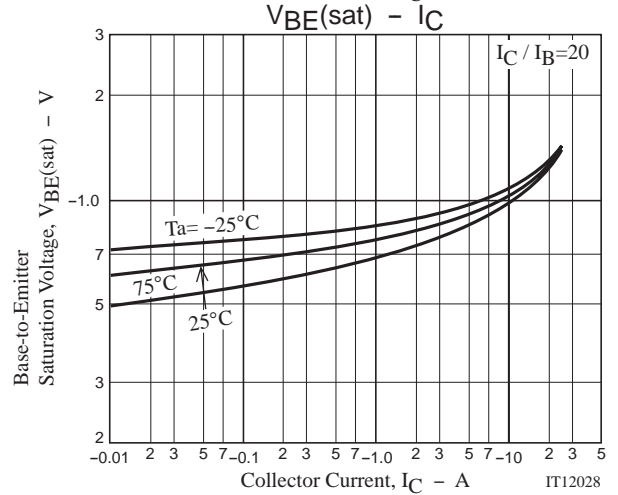
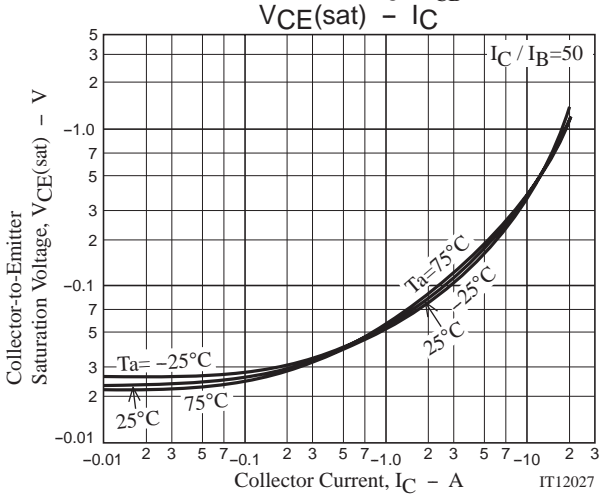
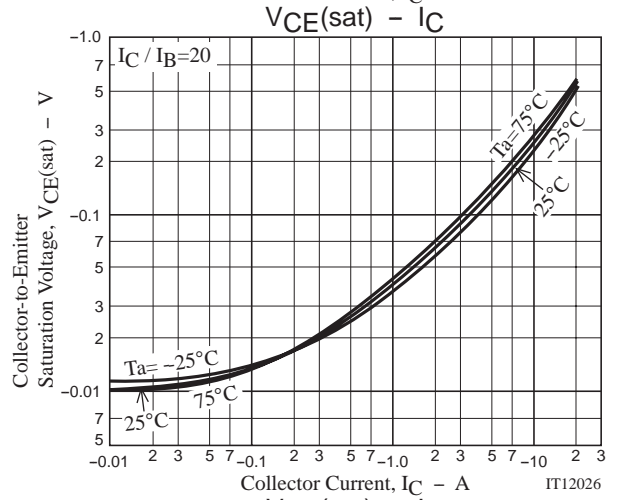
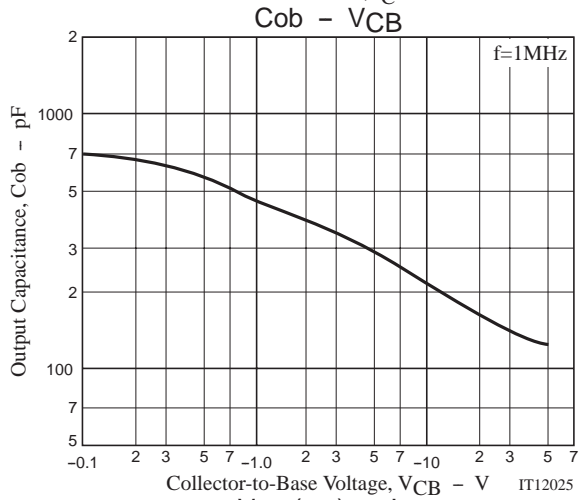
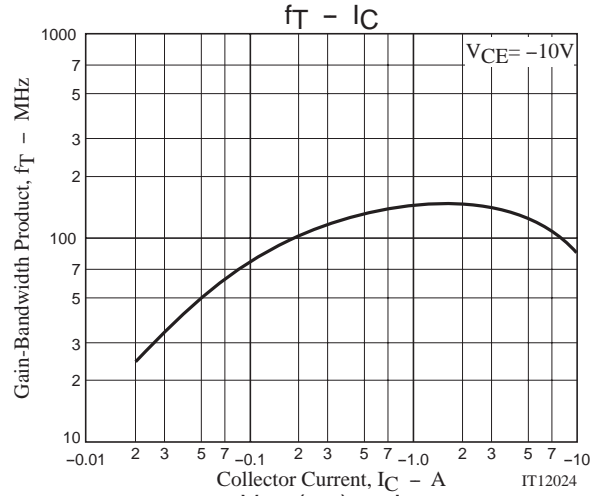
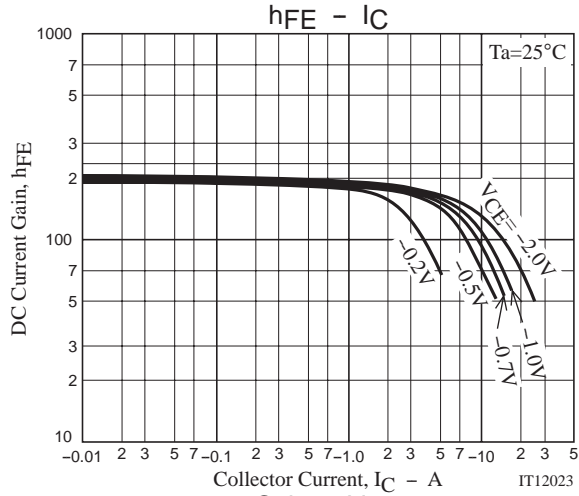
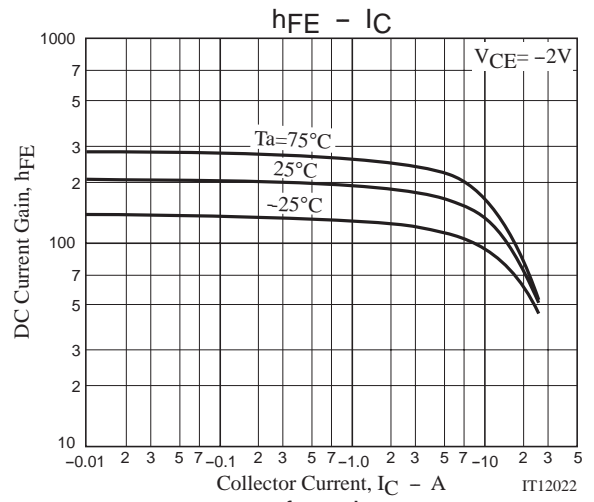
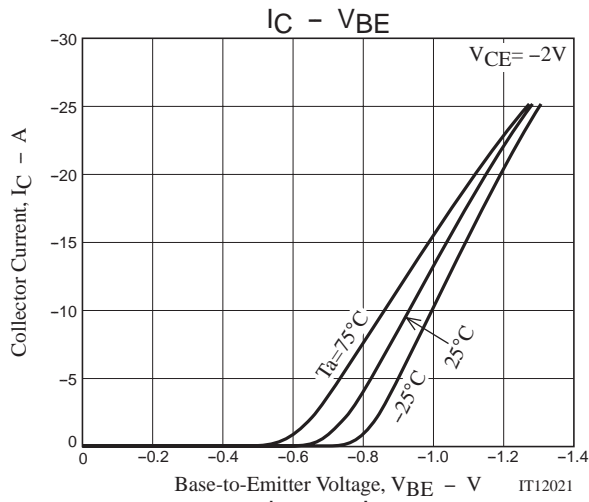
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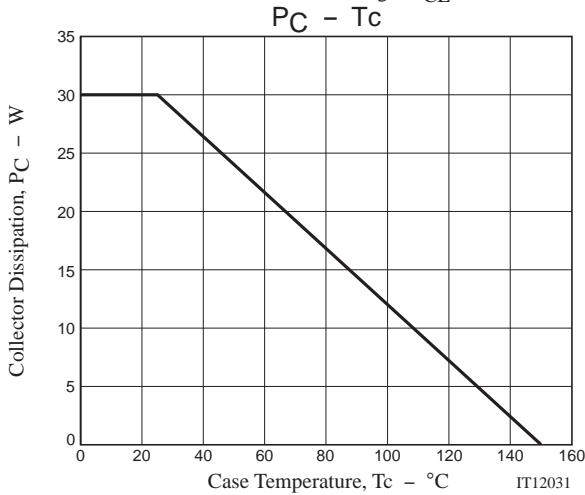
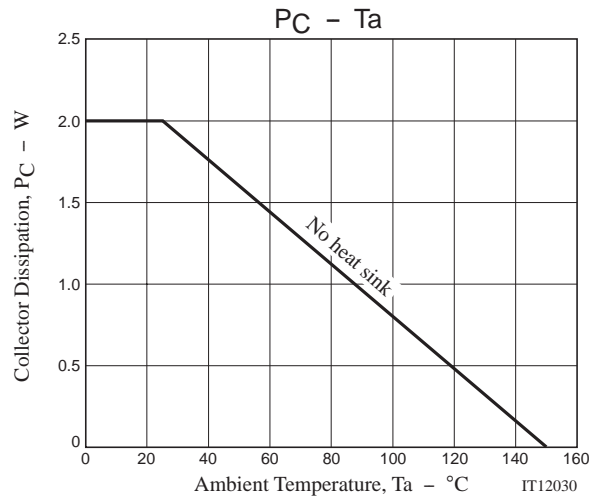
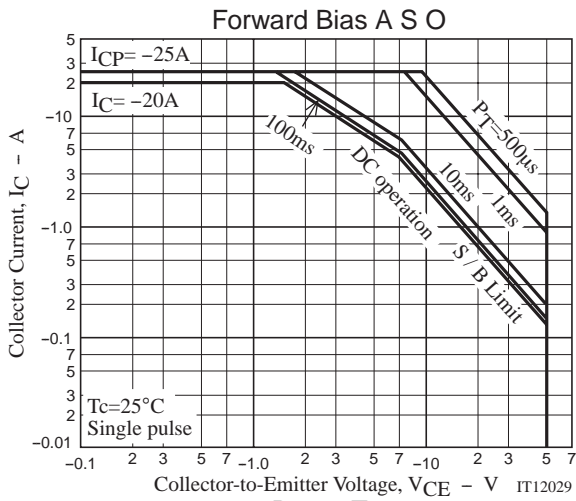


Switching Time Test Circuit



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