

SANYO	No.4473	<h1 style="margin: 0;">2SC5070</h1> <p style="margin: 0;">NPN Epitaxial Planar Silicon Transistor</p> <p style="margin: 0;">Low-Frequency General-Purpose Amp, Driver Applications</p>
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Features

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

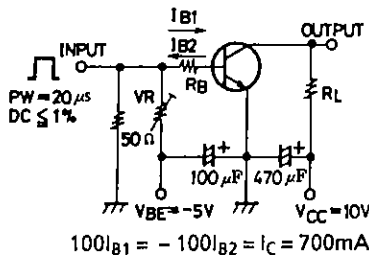
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Collector-to-Base Voltage	V_{CBO}	30	V	
Collector-to-Emitter Voltage	V_{CEO}	25	V	
Emitter-to-Base Voltage	V_{EBO}	15	V	
Collector Current	I_C	2	A	
Collector Current (Pulse)	I_{CP}	4	A	
Base Current	I_B	0.4	A	
Collector Dissipation	P_C	1.5	W	
Junction Temperature	T_j	150	$^\circ\text{C}$	
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$	

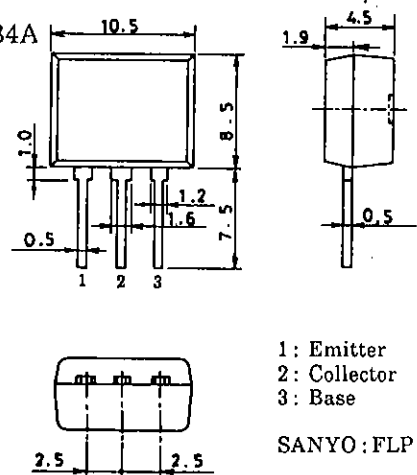
Electrical Characteristics at $T_a = 25^\circ\text{C}$

		min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB} = 20\text{V}, I_E = 0$		100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 10\text{V}, I_C = 0$		100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5\text{V}, I_C = 500\text{mA}$		800	1500
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$		600	3200
Gain-Bandwidth Product	f_T	$V_{CE} = 10\text{V}, I_C = 50\text{mA}$		260	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		27	pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 1\text{A}, I_B = 20\text{mA}$		0.15	0.5
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 1\text{A}, I_B = 20\text{mA}$		0.85	1.2
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$		30	V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, R_{BE} = \infty$		25	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}	"		1.35	μs
Fall Time	t_f	"		0.1	μs

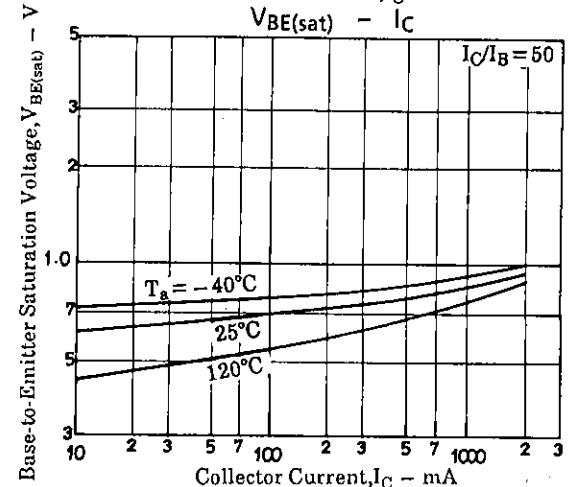
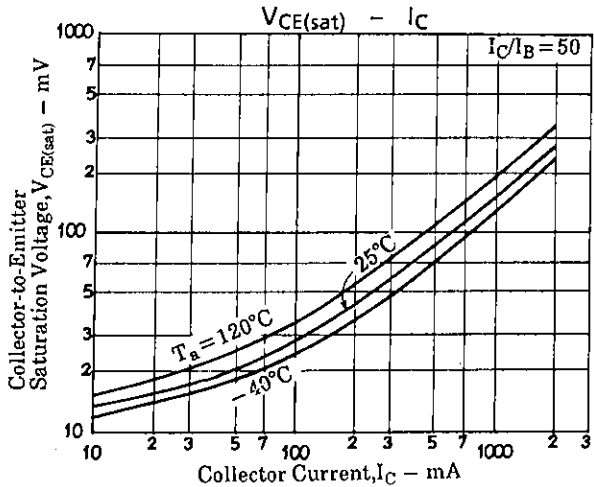
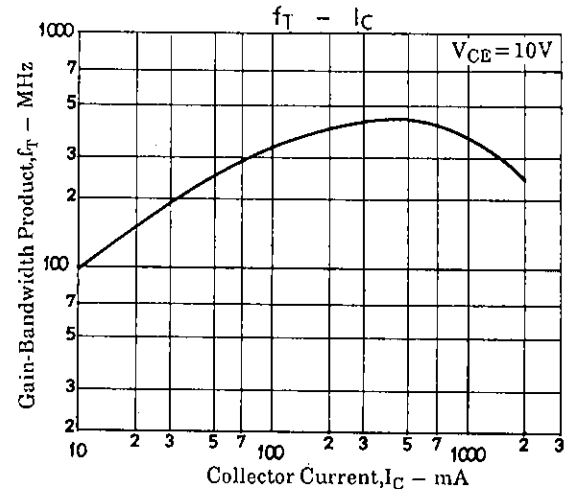
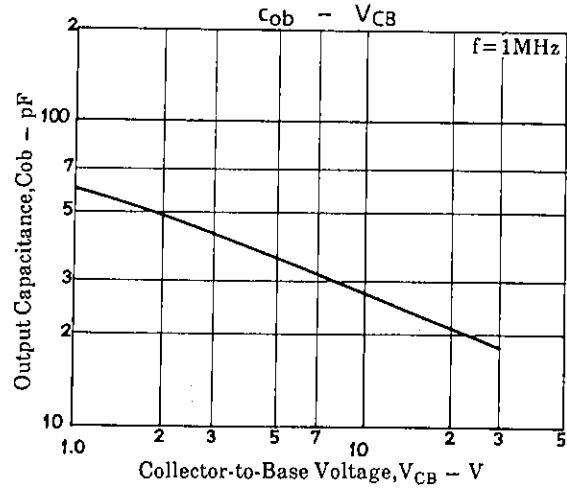
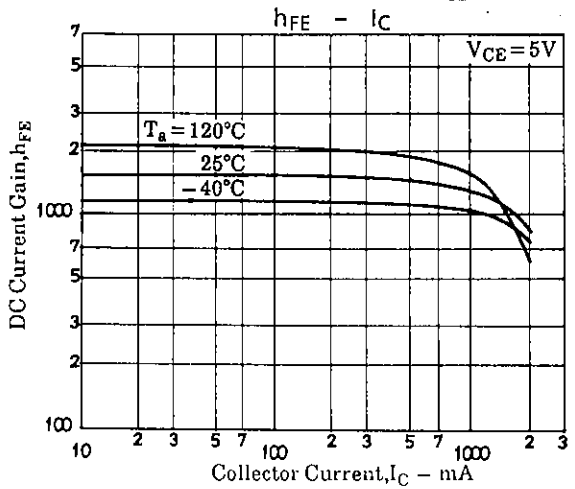
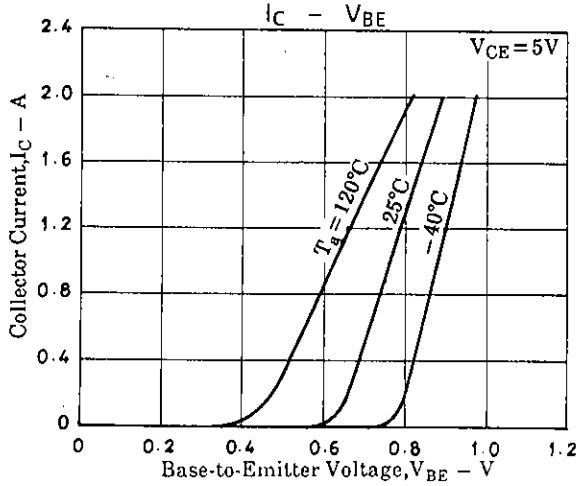
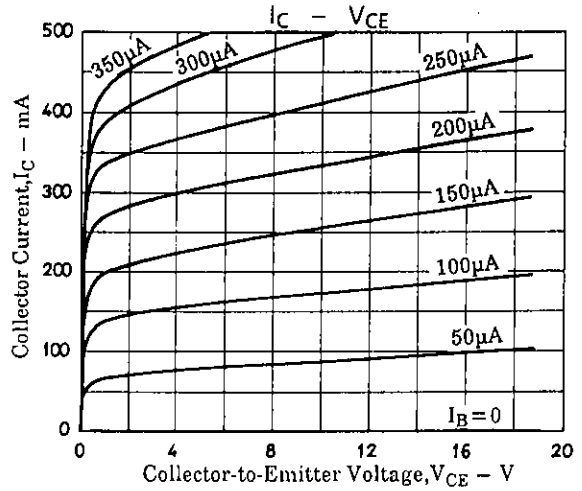
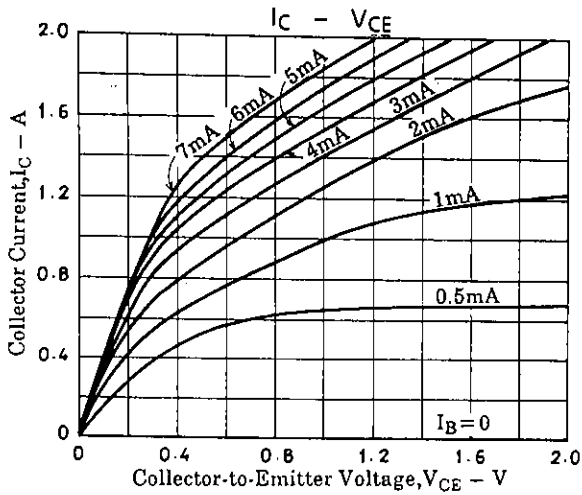
Switching Time Test Circuit

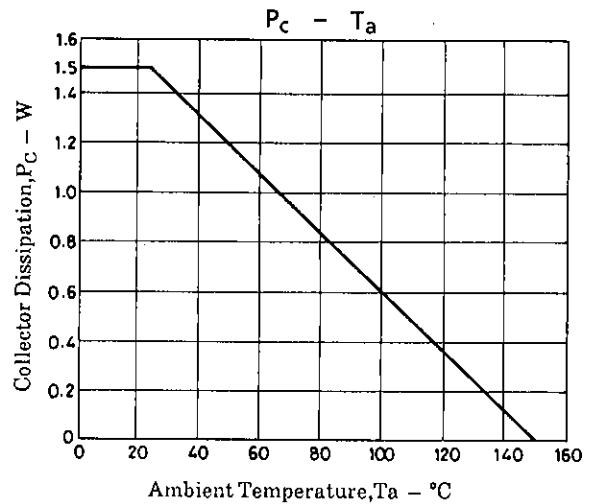
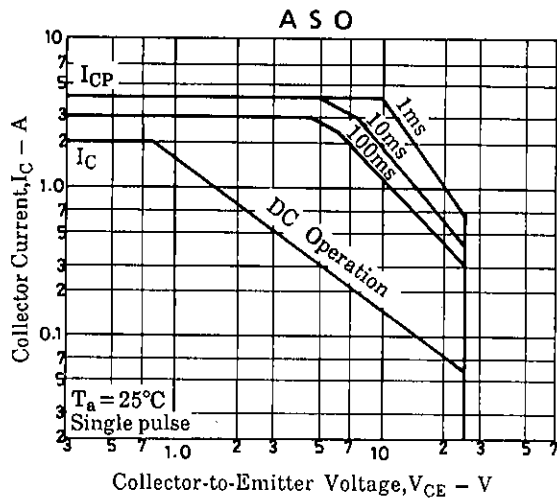


Package Dimensions 2084A
(unit : mm)



1: Emitter
2: Collector
3: Base
SANYO:FLP





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