

SANYO	No.3708	2SC4675
NPN Epitaxial Planar Silicon Transistor		
High-Current Switching Applications		

Features

- Adoption of MBIT process.
- Low saturation voltage.
- Fast switching speed.
- Large current capacity.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V _{CB0}	30	V
Collector-to-Emitter Voltage	V _{CEO}	20	V
Emitter-to-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	8	A
Peak Collector Current	i _{cp}	12	A
Base Current	I _B	1.5	A
Collector Dissipation	P _C	1.5	W
		10	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

T_c = 25°C

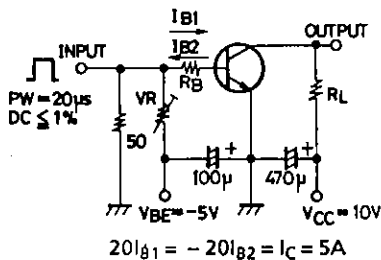
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = 20V, I _E = 0			1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 4V, I _C = 0			1	μA
DC Current Gain	h _{FE} (1)	V _{CE} = 2V, I _C = 500mA	100*		400*	
	h _{FE} (2)	V _{CE} = 2V, I _C = 6A	70			
Gain-Bandwidth Product	f _T	V _{CE} = 2V, I _C = 500mA		250		MHz
Output Capacitance	c _{ob}	V _{CB} = 10V, f = 1MHz		60		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = 5A, I _B = 250mA		220	400	mV
B-E Saturation Voltage	V _{BE(sat)}	I _C = 5A, I _B = 250mA		1	1.3	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	30			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	20			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	5			V
Turn-ON Time	t _{on}	See specified Test Circuit.		30		ns
Storage Time	t _{stg}	∞		250		ns
Fall Time	t _f	∞		15		ns

* : The 2SC4675 is classified by 500mA h_{FE} as follows.

100 R 200	140 S 280	200 T 400
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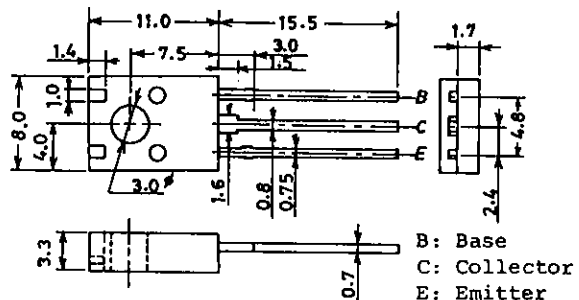
Switching Time Test Circuit



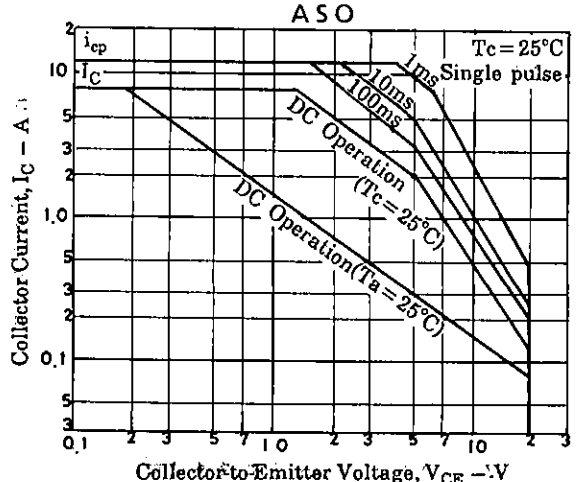
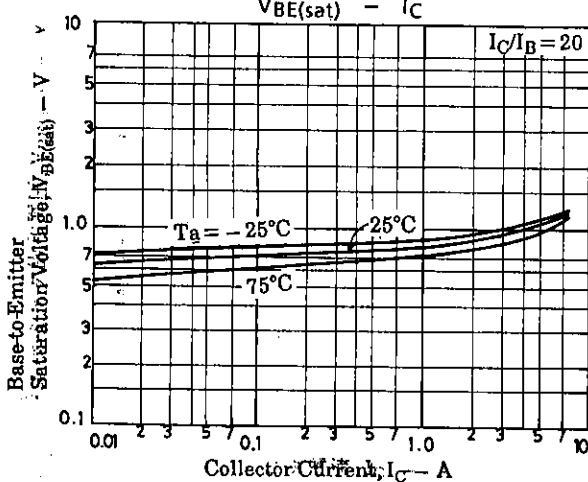
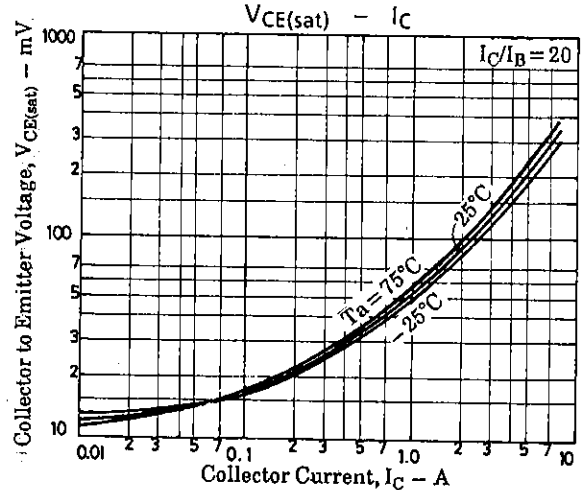
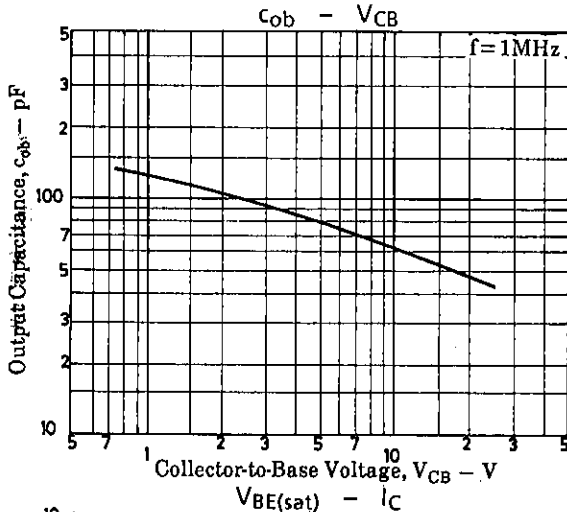
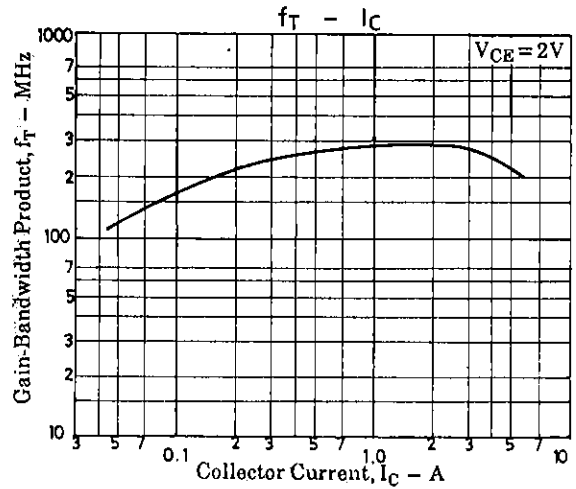
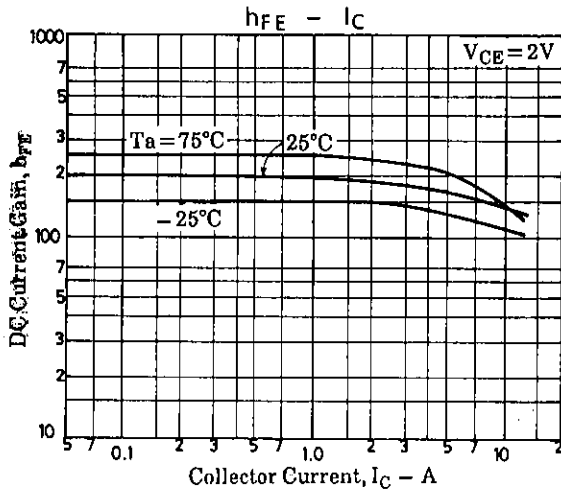
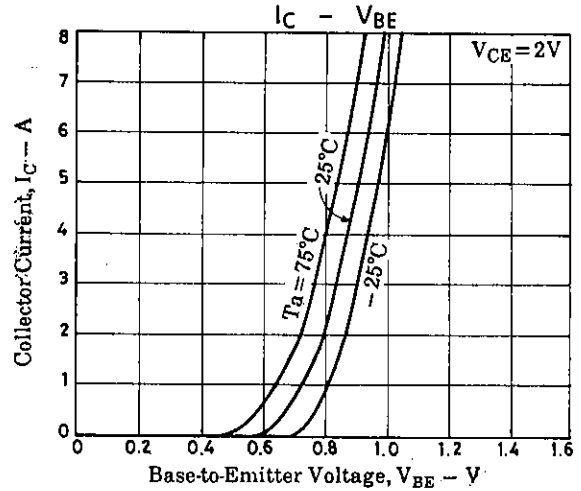
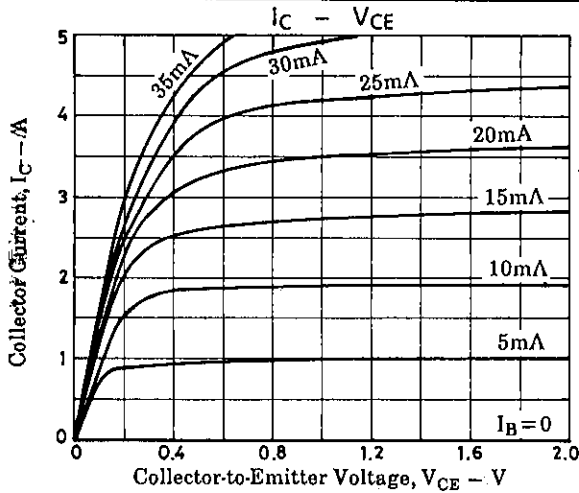
Unit (resistance : Ω, capacitance : F)

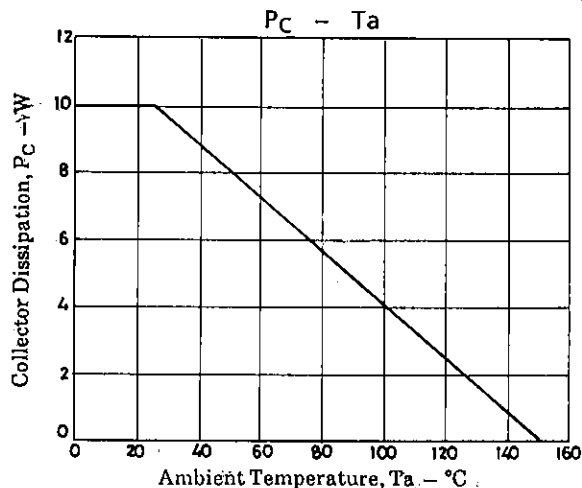
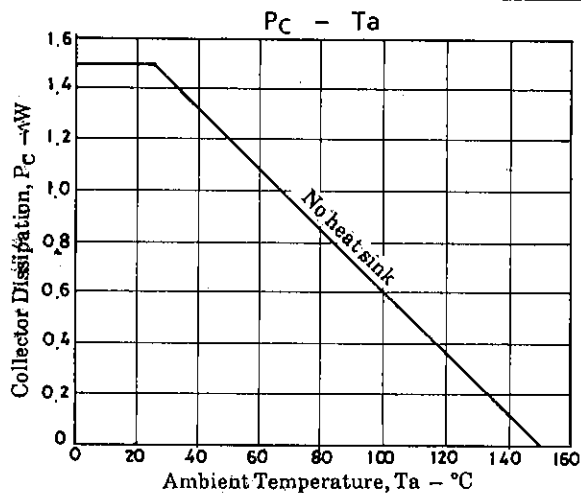
Package Dimensions 2042A

(unit : mm)



SANYO: TO126ML





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