

SANYO	No.3871	2SC4727
		NPN Epitaxial Planar Silicon Transistor 20V/8A Switching Applications

Features

- Adoption of MBIT process.
- Low saturation voltage.
- Fast switching speed.
- Large current capacity.
- It is possible to make appliances more compact because its height on board is 9.5mm.
- Effective in automatic inserting and counting stocked amount because of being provided for radial taping.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V_{CB0}	30	V
Collector-to-Emitter Voltage	V_{CE0}	20	V
Emitter-to-Base Voltage	V_{EB0}	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
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	- 55 to + 150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 20V, I_E = 0$			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
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
Output Capacitance	C_{ob}	$V_{CB} = 10V, f = 1MHz$		60		pF
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5			V

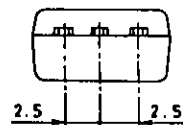
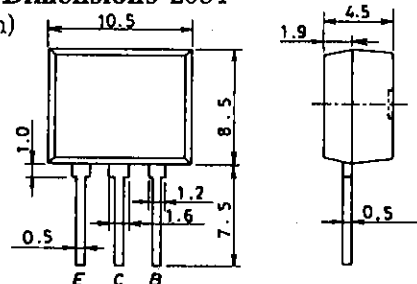
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* : The 2SC4727 is classified by 500mA h_{FE} as follows :

100 R 200	140 S 280	200 T 400
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Package Dimensions 2084

(unit : mm)



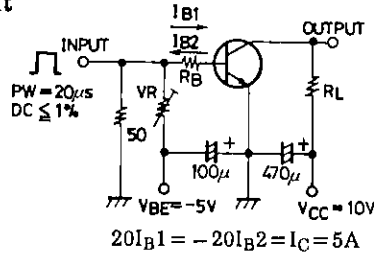
E : Emitter
C : Collector
B : Base

SANYO : FLP

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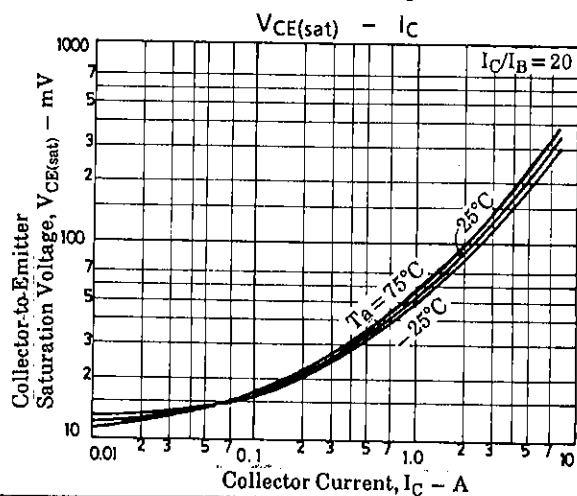
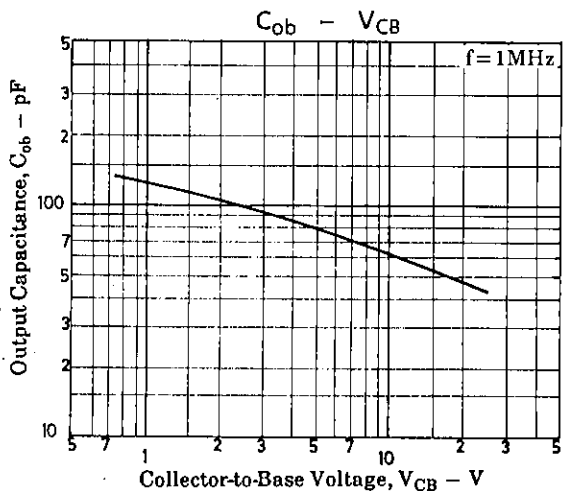
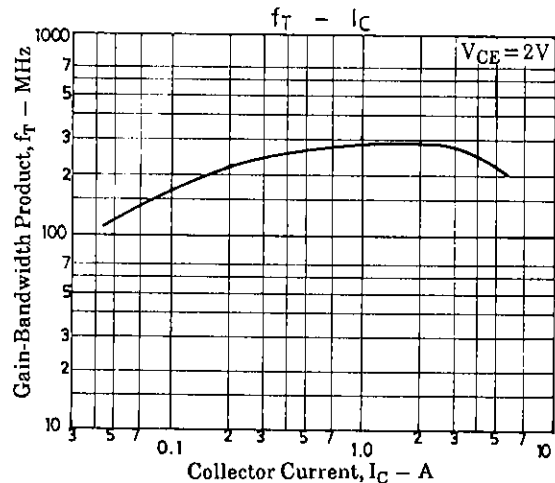
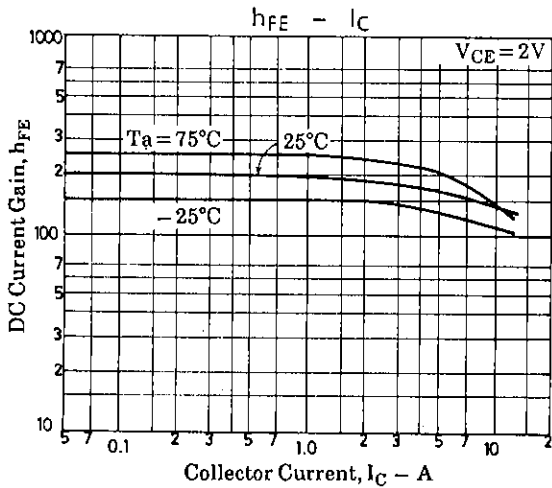
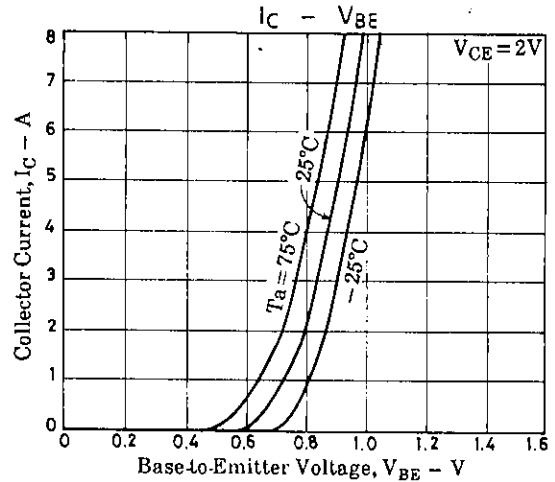
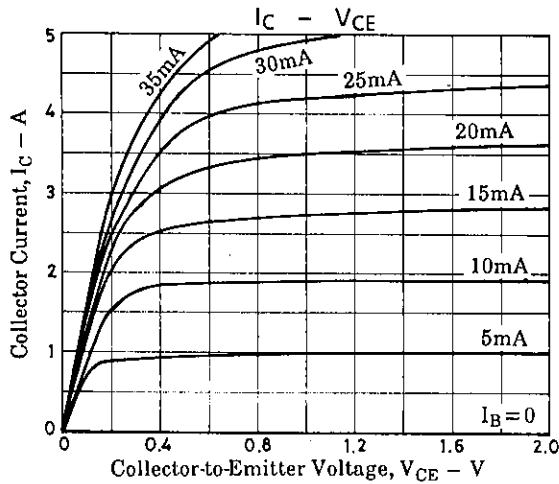
			min	typ	max	unit
Turn ON Time	t_{on}	See specified Test Circuit.		30		ns
Storage Time	t_{stg}	"		250		ns
Fall Time	t_f	"		15		ns

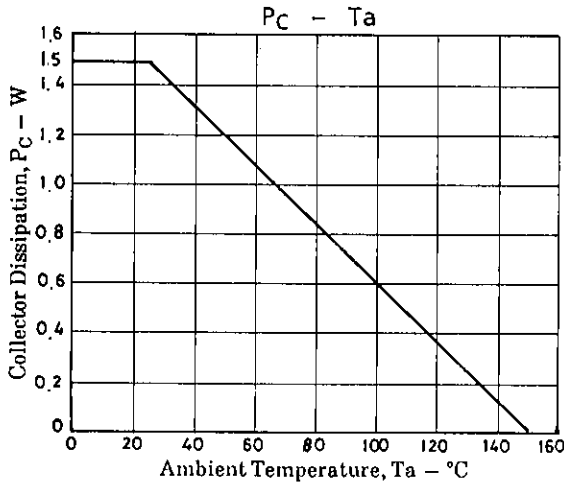
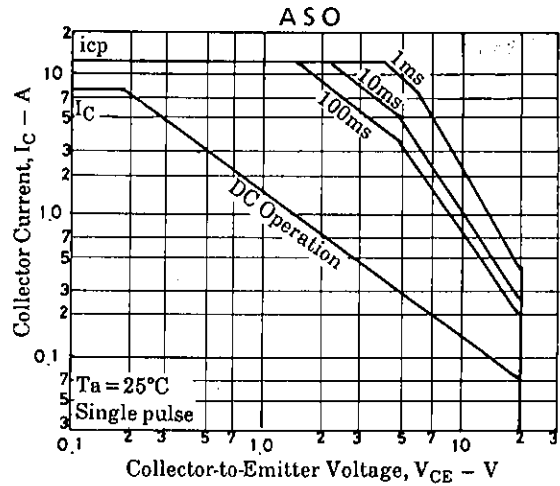
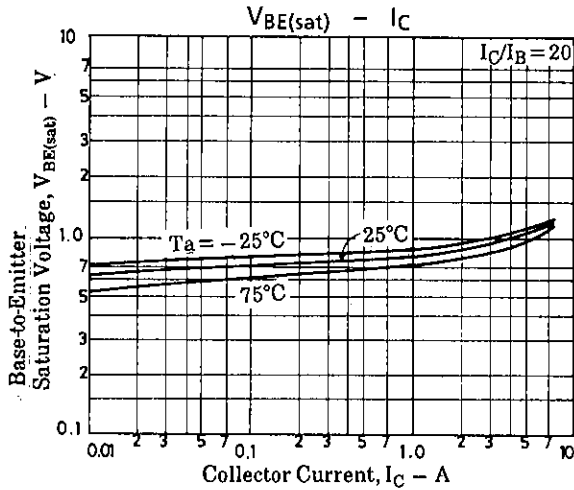
Switching Time Test Circuit



$20I_{B1} = -20I_{B2} = I_C = 5A$

Unit (resistance : Ω , capacitance : F)





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