

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 _{CEO}	20	V
Emitter-to-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	8	A
Collector Current (Pulse)	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 =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

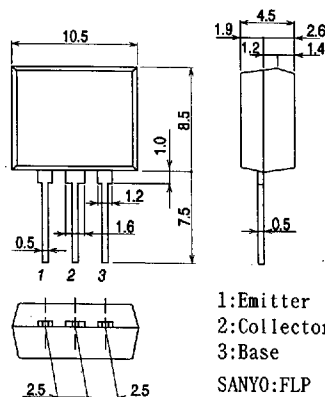
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※ : The 2SC4727 is classified by 500mA h_{FE} as follows :

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

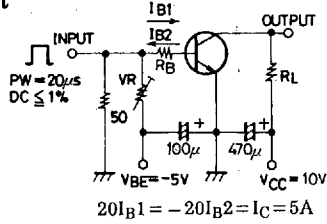
(unit:mm)



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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



Unit (resistance : Ω, capacitance : F)

