

SANYO

No.3708

2SC4675

NPN Epitaxial Planar Silicon Transistor

20V/8A Switching Applications**Features**

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

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

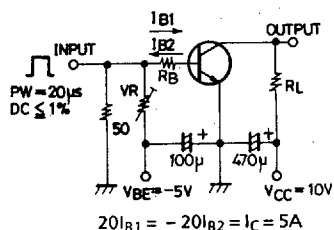
Collector-to-Base Voltage	V_{CB0}	30	V
Collector-to-Emitter Voltage	V_{CE0}	20	V
Emitter-to-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	8	A
Collector Current (Pulse)	I_{CP}	12	A
Base Current	I_B	1.5	A
Collector Dissipation	P_C	1.5	W
		10	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

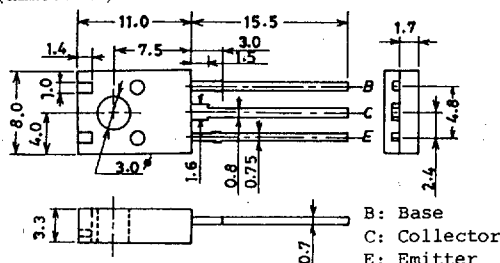
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 20\text{V}, I_E = 0$			1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$			1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	100※		400※	
	$h_{FE}(2)$	$V_{CE} = 2\text{V}, I_C = 6\text{A}$	70			
Gain-Bandwidth Product	f_T	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$		250		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		60		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 5\text{A}, I_B = 250\text{mA}$		220	400	mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 5\text{A}, I_B = 250\text{mA}$		1	1.3	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, R_{BE} = \infty$	20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	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 CircuitUnit (resistance : Ω , capacitance : F)**Package Dimensions 2042A**

(unit : mm)



SANYO: TO126ML

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