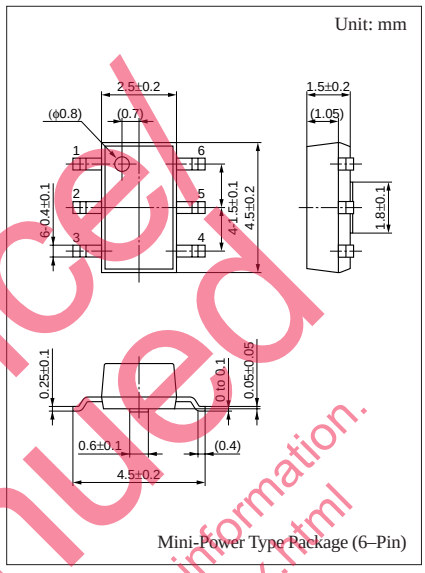
UN603

Silicon PNP epitaxial planer transistor

For DC–DC converter



Features

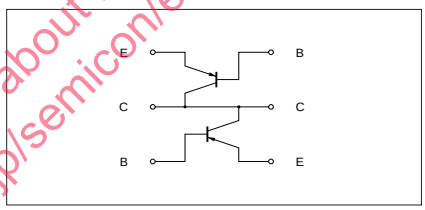
- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.
- Automatic mounting possible through 12mm wide emboss-taping supply.

Basic Part Number of Element

- 2SA1674 × 2 elements

Marking Symbol: 6C

Internal Connection



Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	–80	V
Collector to emitter voltage	V_{CEO}	–80	V
Emitter to base voltage	V_{EBO}	–5	V
Collector current	I_C	–1	A
Peak collector current	I_{CP}	–1.5	A
Total power dissipation	P_T*1	1	W
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	–55 to +150	˚C

*1 Printed circuit board: Copper foil area of 4cm^2 or more and thickness of 1.7mm for the collector portion.

Electrical Characteristics (Ta=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V_{CBO}	I_C = –10μA, I_E = 0	–80			V
Collector to emitter voltage	V_{CEO}	I_C = –1mA, I_B = 0	–80			V
Emitter to base voltage	V_{EBO}	I_E = –10μA, I_C = 0	–5			V
Collector cutoff current	I_{CBO}	V_{CB} = –40V, I_E = 0			– 0.1	μA
Forward current transfer ratio	h_{FE1}	V_{CE} = –2V, I_C = –100mA*	120		340	
	h_{FE2}	V_{CE} = –2V, I_C = –500mA*	60			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = –500mA, I_B = –50mA*		– 0.2	– 0.3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = –500mA, I_B = –50mA*		– 0.85	–1.2	V
Transition frequency	f_T	V_{CB} = –10V, I_E = 50mA, f = 200MHz		120		MHz
Collector output capacitance	C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz		15	30	pF

* Pulse test

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