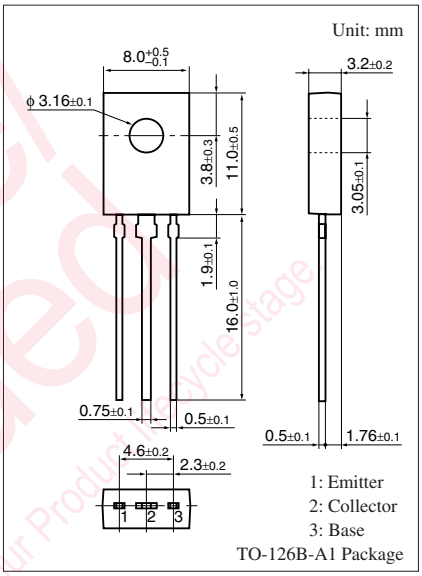
2SA1096, 2SA1096A

Silicon PNP epitaxial planar type

For low-frequency power amplification
Complementary to 2SC2497, 2SC2497A



■ Features

- Output of 5 W can be obtained by a complementary pair with 2SC2497 and 2SC2497A
- TO-126B package which requires no insulation plate for installation to the heat sink

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Collector-base voltage (Emitter open)		V_{CBO}	−70	V
Collector-emitter voltage (Base open)	2SA1096	V_{CEO}	−50	V
	2SA1096A		−60	
Emitter-base voltage (Collector open)		V_{EBO}	−5	V
Collector current		I_C	−2	A
Peak collector current		I_{CP}	−3	A
Collector power dissipation		P_C	1.2	W
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

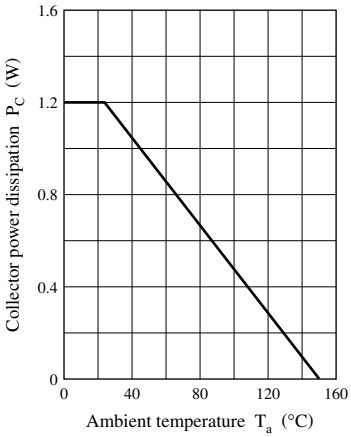
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)		V_{CBO}	$I_C = -1$ mA, $I_E = 0$	−70			V
Collector-emitter voltage (Base open)	2SA1096	V_{CEO}	$I_C = -2$ mA, $I_B = 0$	−50			V
	2SA1096A			−60			
Collector-base cutoff current (Emitter open)		I_{CBO}	$V_{CB} = -20$ V, $I_E = 0$			−1	μA
Collector-emitter cutoff current (Base open)		I_{CEO}	$V_{CE} = -10$ V, $I_B = 0$			−100	μA
Emitter-base cutoff current (Collector open)		I_{EBO}	$V_{EB} = -5$ V, $I_C = 0$			−10	μA
Forward current transfer ratio *1,2		h_{FE}	$V_{CE} = -5$ V, $I_C = -1$ A	80		220	—
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = -1.5$ A, $I_B = -0.15$ A			−1	V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C = -1.5$ A, $I_B = -0.15$ A			−1.5	V
Transition frequency		f_T	$V_{CB} = -5$ V, $I_E = 0.5$ A, f = 200 MHz		150		MHz
Collector output capacitance (Common base, input open circuited)		C_{ob}	$V_{CB} = -20$ V, $I_E = 0$, f = 1 MHz		55		pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. ∗1: Pulse measurement
∗2: Rank classification

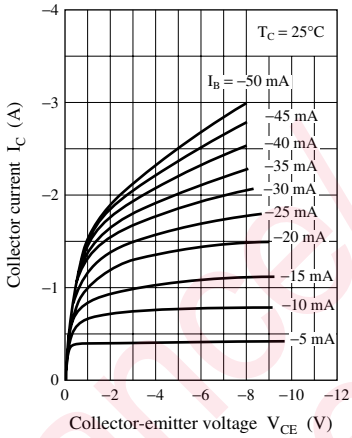
Rank	Q	R
h_{FE}	80 to 160	120 to 220

Maintenance/Discontinued
We have established the following four Product Lifecycle stage
1. Maintenance includes planned maintenance type
2. Discontinued typed
please discontinued type
3. Please following URL about latest information.
http://www.semicon.panasonic.co.jp/en/

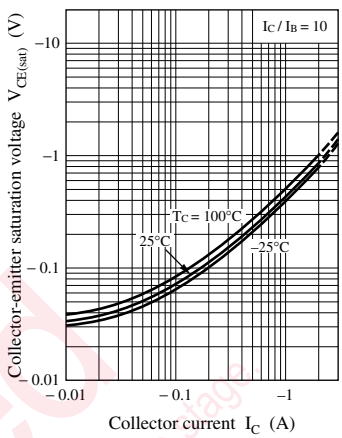
P_C — T_a



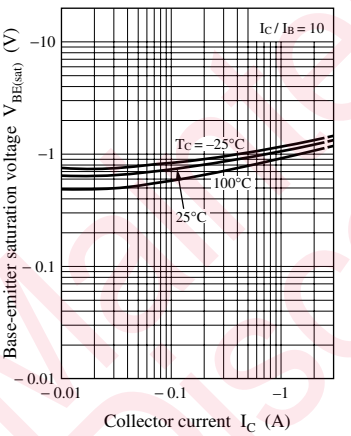
I_C — V_{CE}



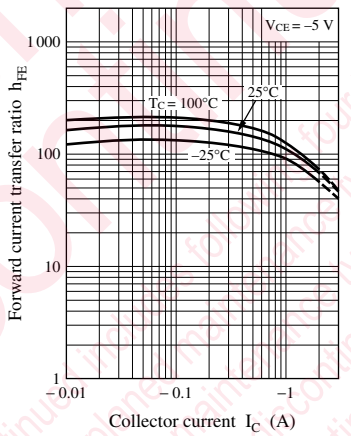
$V_{CE(sat)}$ — I_C



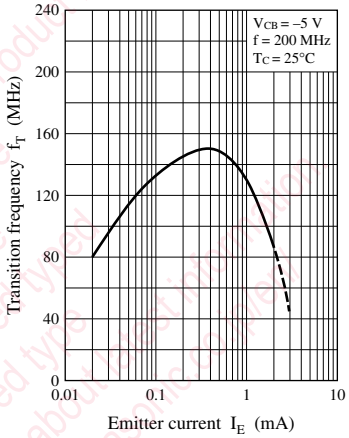
$V_{BE(sat)}$ — I_C



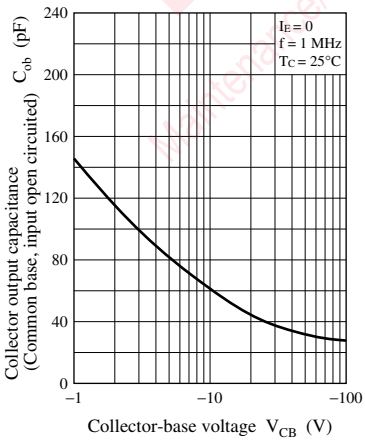
h_{FE} — I_C



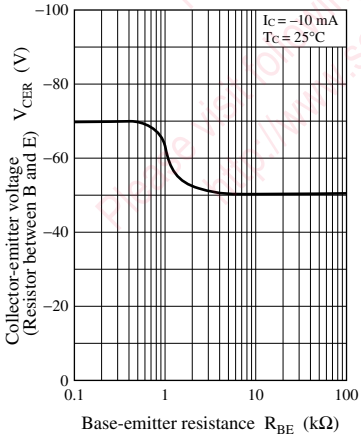
f_T — I_E



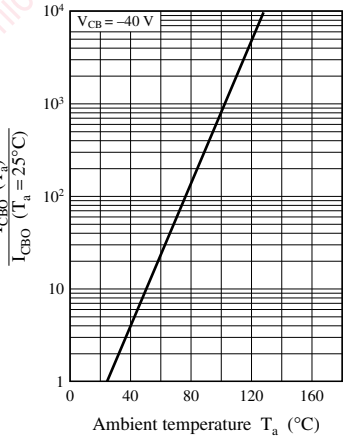
C_{ob} — V_{CB}



V_{CER} — R_{BE}

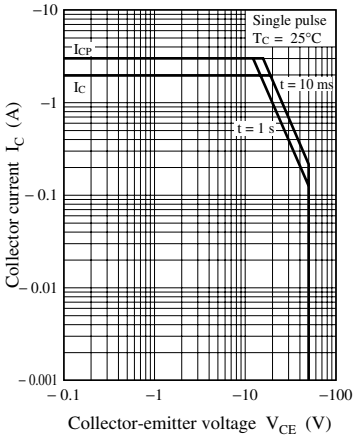


I_{CBO} — T_a



Maintenance/Discontinued
Discontinued
Maintenance/Discontinued Product lifecycle stage
Please visit the successor type.
Planned discontinued type
Planned discontinued type
Please visit the following URL about the successor type.
http://www.semicon.panasonic.co.jp/en/

Safe operation area



Maintenance/ Discontinued
Maintenance/Discontinued includes following four Product lifecycle stage.
planed maintenance type
maintenance type
planed discontinued typed
discontinued type
Please visit following URL about latest information.
http://www.semicon.panasonic.co.jp/en/

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Maintenance/Discontinued
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