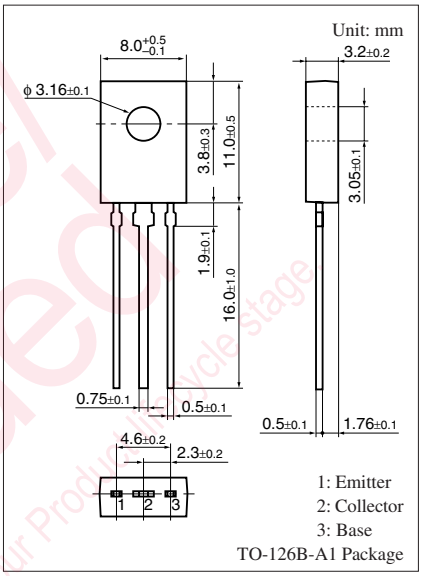
2SC2497, 2SC2497A

Silicon NPN epitaxial planar type

For low-frequency power amplification
Complementary to 2SA1096, 2SC1096A



■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- 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)	2SC2497	V_{CEO}	50	V
	2SC2497A		60	
Emitter-base voltage (Collector open)		V_{EBO}	5	V
Collector current		I_C	1.5	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 $T_a = 25°C \pm 3°C$

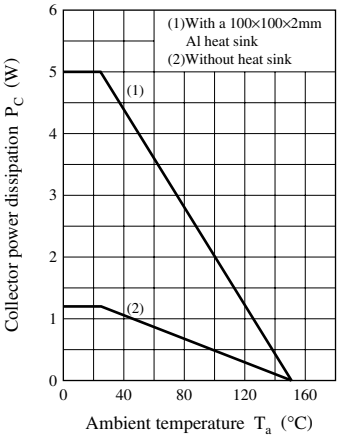
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)		V_{CBO}	I_C = 1 mA, I_E = 0	70			V
Collector-emitter voltage (Base open)	2SC2497	V_{CEO}	I_C = 2 mA, I_B = 0	50			V
	2SC2497A			60			
Collector-base cutoff current (Emitter open)		I_{CBO}	V_{CB} = 20 V, I_E = 0			1	μA
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		35		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

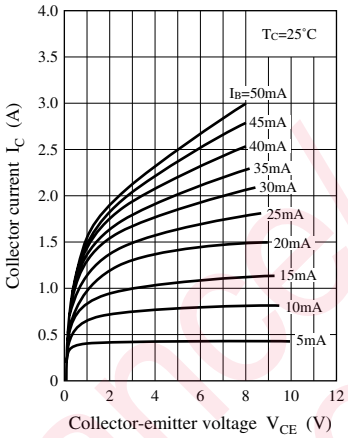
Rank	Q	R
h_{FE}	80 to 160	120 to 220

Maintenance/Discontinued
This product will be discontinued following four Product Life Cycle stage
Planned maintenance type
Maintenance type
Planned discontinued type
discontinued type
Please check following URL about the latest information.
http://www.semicon.panasonic.co.jp/en/

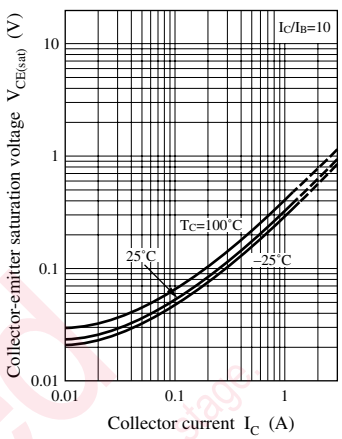
P_C — T_a



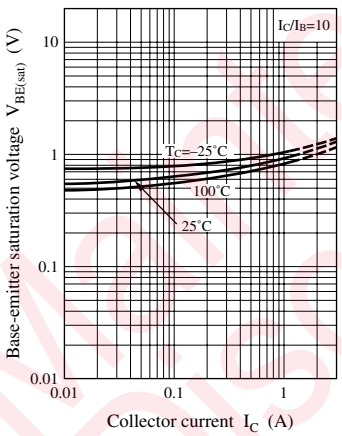
I_C — V_{CE}



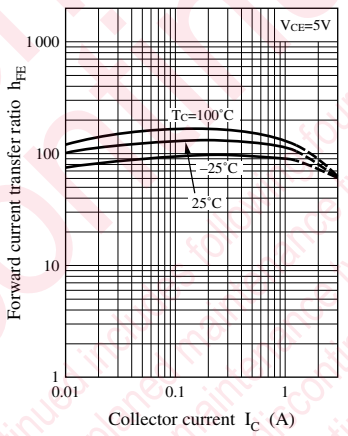
$V_{CE(sat)}$ — I_C



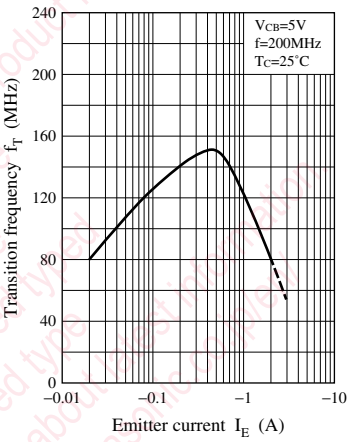
$V_{BE(sat)}$ — I_C



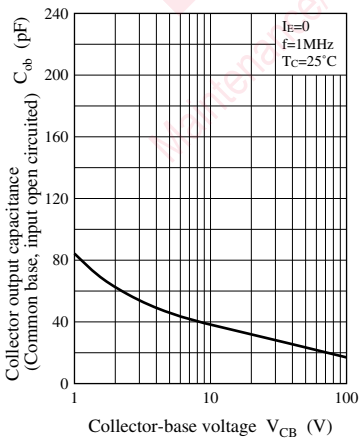
h_{FE} — I_C



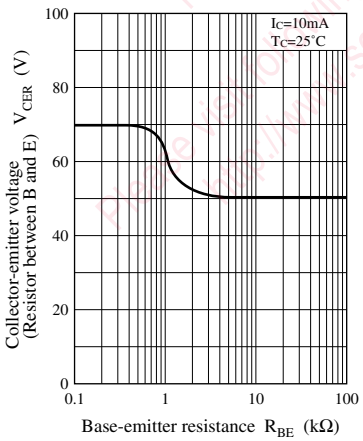
f_T — I_E



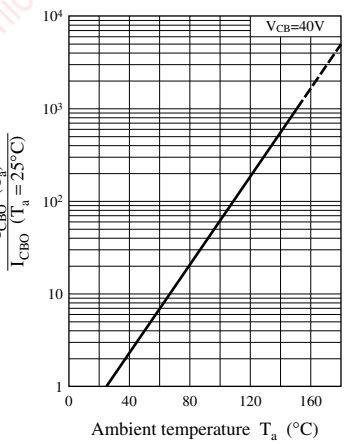
C_{ob} — V_{CB}



V_{CER} — R_{BE}

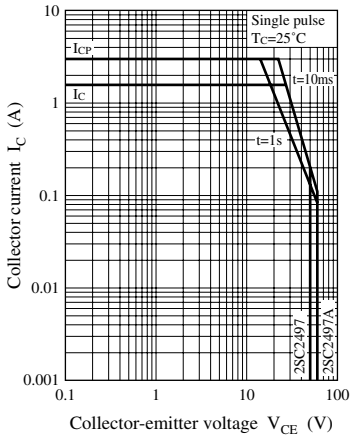


I_{CBO} — T_a



Maintenance/Discontinued
Maintenance/Discontinued
Please visit the successor Product lifecycle stage
planned discontinued type, refer to the successor type.
Please visit the successor type.
Maintenance/Discontinued
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Safe operation area



Maintenance/ Discontinued
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