Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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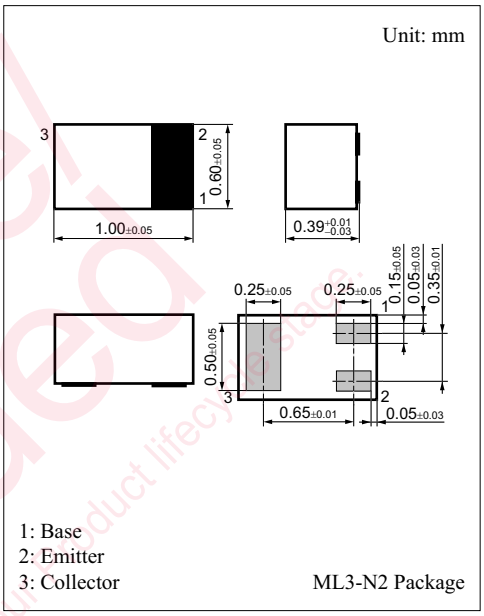
2SA2079

Silicon PNP epitaxial planar type

For general amplification
Complementary to 2SC5848



Marking Symbol : 3D

■ Features

- High forward current transfer ratio h_{FE}
- Suitable for high-density mounting and douwsizing of the equipment for ultraminiature leadless package
  Package: 0.6 mm × 1.0 mm (hight 0.39 mm)

■ Absolute Maximum Ratings $T_a = 25°C$

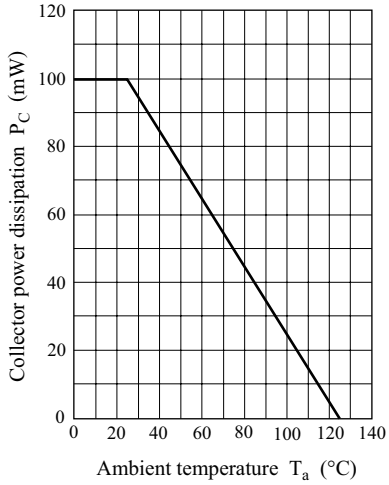
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	–45	V
Collector-emitter voltage (Base open)	V_{CEO}	–45	V
Emitter-base voltage (Collector open)	V_{EBO}	–7	V
Collector current	I_C	–100	mA
Peak collector current	I_{CP}	–200	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

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

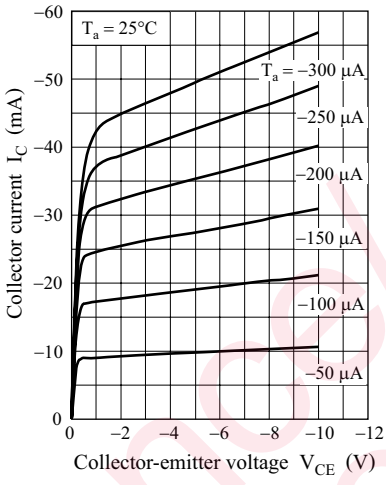
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10\ \mu A$, $I_E = 0$	–45			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -2$ mA, $I_B = 0$	–45			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10\ \mu A$, $I_C = 0$	–7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -20$ V, $I_E = 0$			– 0.1	μA
Collector-emitter cut-off current (Base open)	I_{CEO}	$V_{CE} = -10$ V, $I_B = 0$			–100	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = -10$ V, $I_C = -2$ mA	180		390	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100$ mA, $I_B = -10$ mA		– 0.2	– 0.5	V
Transition frequency	f_T	$V_{CB} = -10$ V, $I_E = 1$ mA, f = 200 MHz		80		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -10$ V, $I_E = 0$, f = 1 MHz		2.2		pF

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

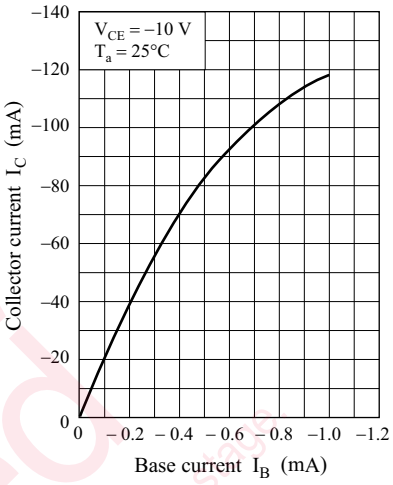
P_C — T_a



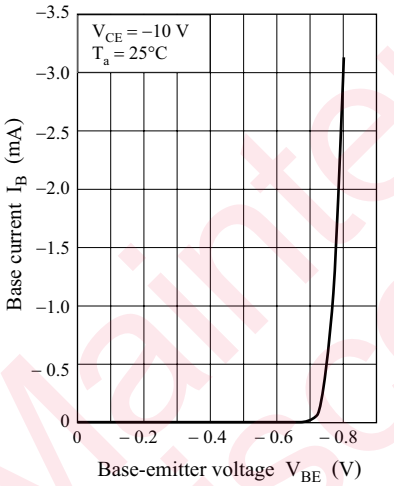
I_C — V_{CE}



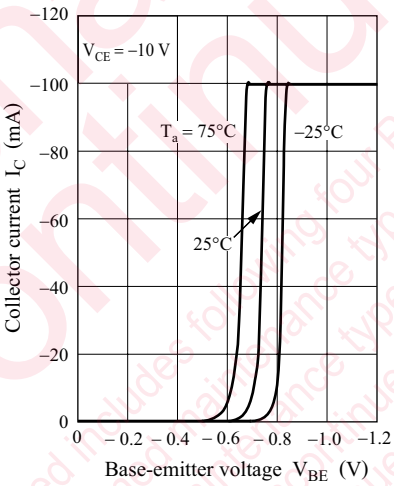
I_C — I_B



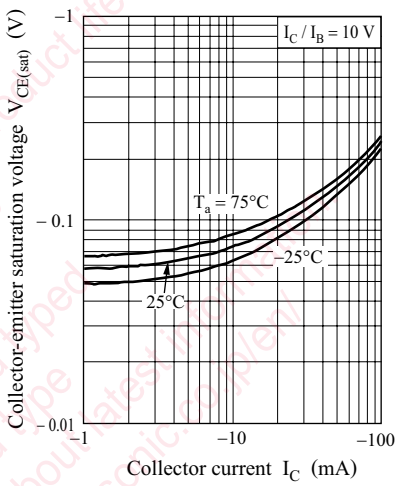
I_B — V_{BE}



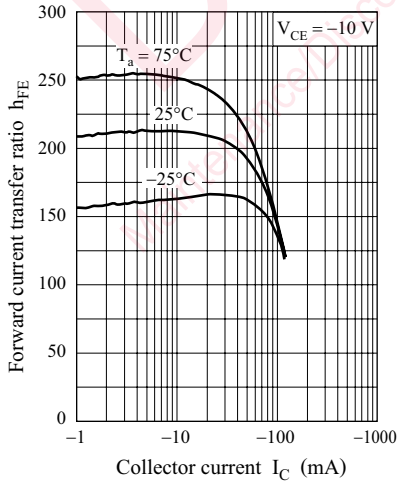
I_C — V_{BE}



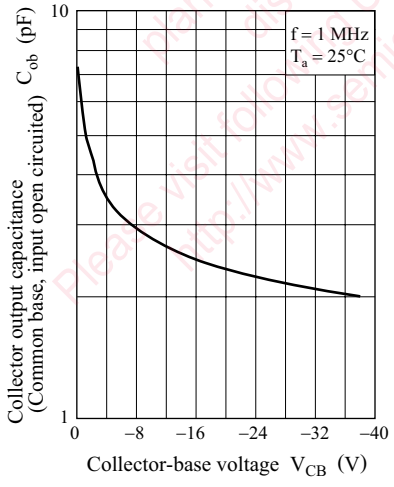
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



C_{ob} — V_{CB}



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