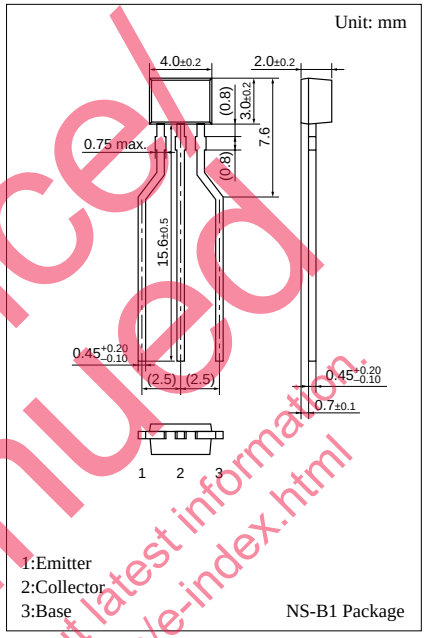
2SA1816(Tentative)

Silicon PNP epitaxial planer type

For low-frequency high breakdown voltage amplification



Features

- High collector to emitter voltage V_{CEO}.

Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	–150	V
Collector to emitter voltage	V_{CEO}	–150	V
Emitter to base voltage	V_{EBO}	–5	V
Peak collector current	I_{CP}	–100	mA
Collector current	I_C	–50	mA
Collector power dissipation	P_C	300	mW
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	–55 ~ +150	˚C

Electrical Characteristics (Ta=25˚C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = –100V, I_E = 0			–1	µA
Collector to emitter voltage	V_{CEO}	I_C = –100µA, I_B = 0	–150			V
Emitter to base voltage	V_{EBO}	I_E = –10µA, I_C = 0	–5			V
Forward current transfer ratio	h_{FE} *1	V_{CE} = –5V, I_C = –10mA	90		450	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = –30mA, I_B = –3mA			–1	V
Transition frequency	f_T	V_{CB} = –10V, I_E = 10mA, f = 200MHz		200		MHz
Collector output capacitance	C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz			5	pF
Noise voltage	NV	V_{CE} = –10V, I_C = – 1mA, G_V = 80dB R_g = 100kΩ, Function = FLAT		150		mV

*1 h_{FE} Rank classification

Rank	Q	R	S	T
h_{FE}	90 ~ 155	130 ~ 220	185 ~ 330	260 ~ 450

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