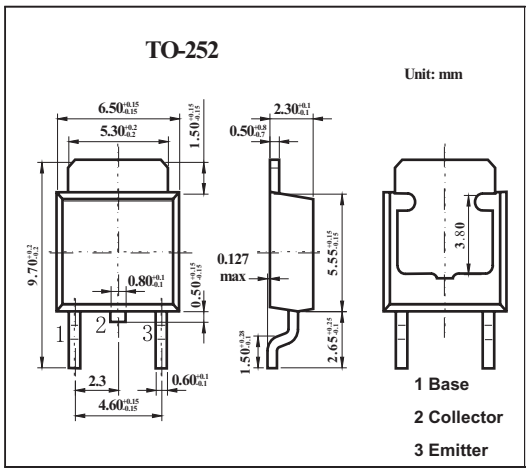
TY Semicondutor®

Product specification

2SB1407S



■ Features

- Low frequency power amplifier.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-35	V
Collector to emitter voltage	V_{CEO}	-35	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-2.5	A
Peak collector current	I_{CP}	-3	A
Collector power dissipation	P_C	18	W
Junction temperature	Tj	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = -1 mA, I_E = 0	-35			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -10 mA, R_{BE} = ∞	-35			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E = -1 mA, I_C = 0	-5			V
Collector cutoff current	I_{CBO}	V_{CB} = -35 V, I_E = 0			-20	μA
DC current transfer ratio	h_{FE}	V_{CE} = -2 V,I_C = -0.5 A	60		320	
		V_{CE} = -2 V,I_C = -1.5 A	20			
Base to emitter voltage	V_{BE}	V_{CE} = -2 V,I_C = -1.5 A			-1.5	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = -2 A,I_B = -0.2 A			-1.0	V

■ h_{FE} Classification

Rank	B	C	D
hFE	60～120	100～200	160～320