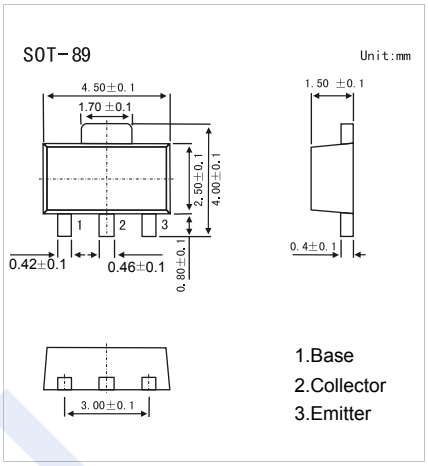
PNP Transistors

2SB1025



■ Features

- Low frequency power amplifier
- Complementary to 2SD1418

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-120	V
Collector - Emitter Voltage	V_{CEO}	-80	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-1	A
Collector current -Pulse (Note.1)	I_{CP}	-2	
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

Note.1: PW ≤ 10ms,Duty cycle≤ 20%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-120			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, R_{BE}=∞	-80			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -100V , I_E=0			-10	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA			-1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-500 mA, I_B=-50mA			-1.2	
Base - emitter voltage	V_{BE}	V_{CE}= -5V, I_C= -150 mA			-0.9	
DC current gain	h_{FE}	V_{CE}= -5V, I_C= -150 mA	60		320	
		V_{CE}= -5V, I_C= -500 mA	30			
Collector output capacitance	C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz		20		pF
Transition frequency	f_T	V_{CE}= -5V, I_C= -150mA		140		MHz

■ Classification of $h_{fe(1)}$

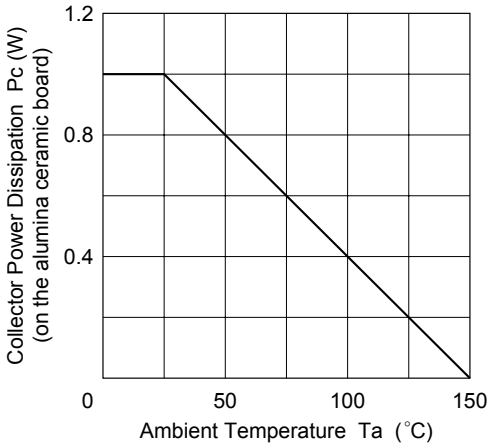
Type	2SB1025-H	2SB1025-J	2SB1025-K
Range	60-120	100-200	160-320
Marking	DH	DJ	DK

PNP Transistors

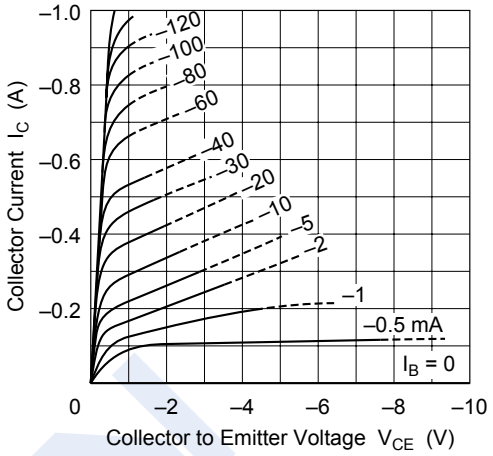
2SB1025

■ Typical Characterisitics

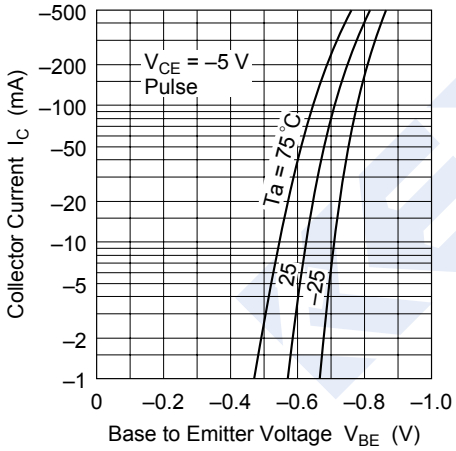
Maximum Collector Dissipation Curve



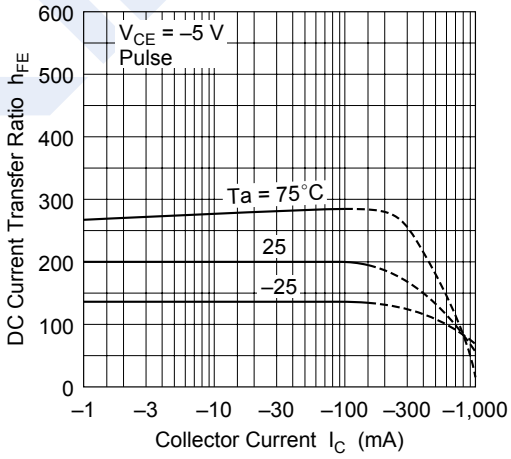
Typical Output Characteristics



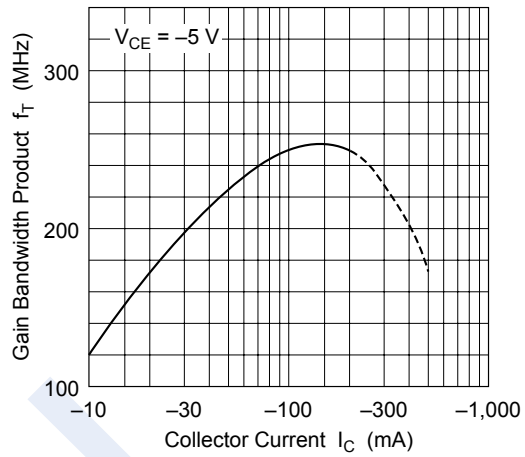
Typical Output Characteristics



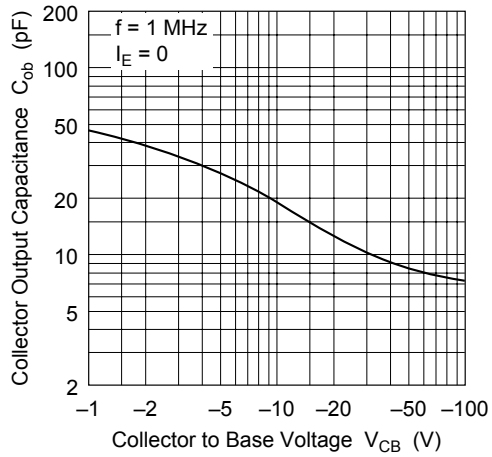
DC Current Transfer Ratio vs.
Collector Current



Gain Bandwidth Product vs.
Collector Current



Collector Output Capacitance vs.
Collector to Base Voltage



PNP Transistors

2SB1025

■ Typical Characterisitics

