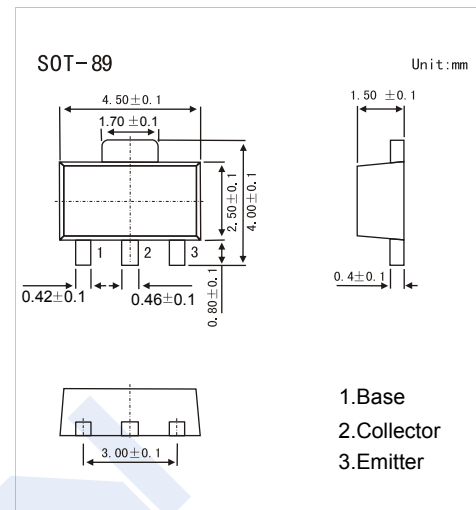


PNP Transistors

2SA1368-HF

■ Features

- High Voltage $V_{CE0} = -100V$
- High Collector Current ($I_{CM} = -800mA$)
- High Collector Dissipation $P_C = 500mW$
- Small Package For Mounting
- Complementary to 2SC3438-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-100	V
Collector-Emitter Voltage	V_{CE0}	-100	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-500	mA
Peak Collector Current	I_{CM}	-800	mA
Collector Power Dissipation	P_C	500	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature Range	T_{stg}	-55 to +150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu A, I_E = 0$	-100			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 mA, R_{BE} = \infty$	-100			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -50 V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -4 V, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150 mA, I_B = -15 mA$		-0.15	-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150 mA, I_B = -15 mA$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -10 V, I_C = -10 mA$	55		300	
Collector Output Capacitance	C_{ob}	$V_{CE} = -10 V, I_E = 0, f = 1 MHz$		11		pF
Transition frequency	f_T	$V_{CE} = -10 V, I_E = 10 mA$		130		MHz

■ Classification of h_{FE}

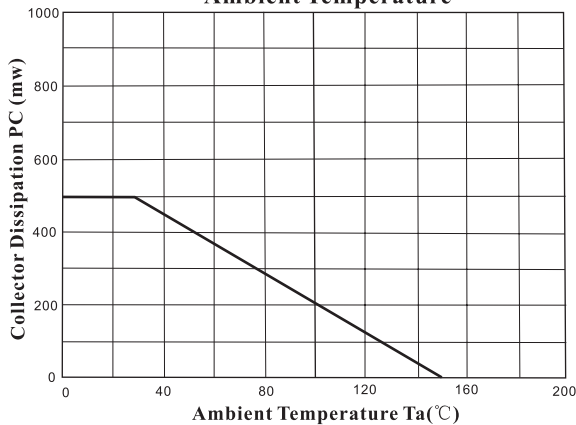
Type	2SA1368-C-HF	2SA1368-D-HF	2SA1368-E-HF
Range	55-110	90-180	150-300
Marking	EC _F	ED _F	EE _F

PNP Transistors

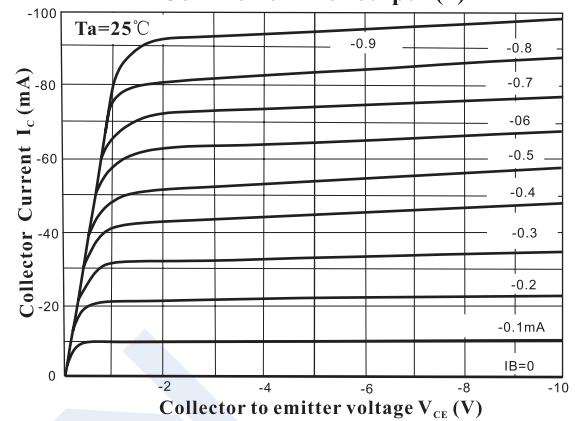
2SA1368-HF

■ Typical Characteristics

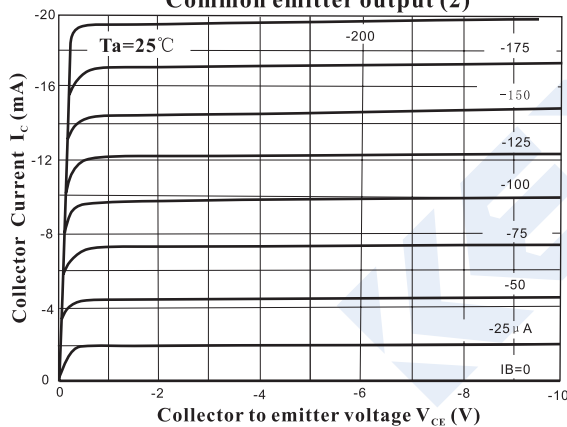
Collector Dissipation vs Ambient Temperature



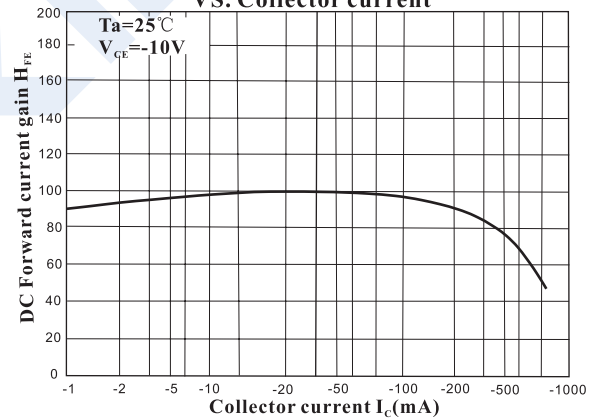
Common emitter output (1)



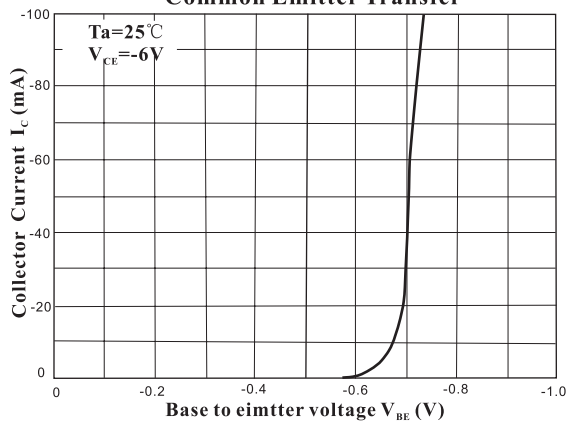
Common emitter output (2)



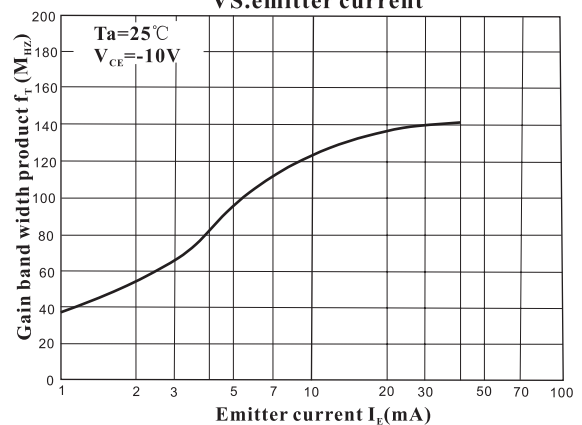
DC Forward current gain VS. Collector current



Common Emitter Transfer



Gain band width product VS. emitter current



PNP Transistors

2SA1368-HF

■ Typical Characteristics

