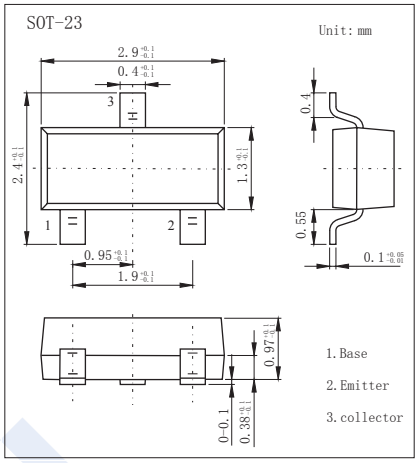
PNP Transistors

2SA1468



■ Features

● High voltage amplifier

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-180	V
Collector - Emitter Voltage	V_{CEO}	-180	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ 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	-180			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -0.5 mA, R_{BE}=∞	-180			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -180 V , I_E=0			-0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-0.1	
Collector-emitter saturation voltage (Note.1)	$V_{CE(sat)}$	I_C=-30 mA, I_B=-3 mA			-0.5	V
Base - emitter saturation voltage (Note.1)	$V_{BE(sat)}$	I_C=-30 mA, I_B=-3 mA			-1.2	
Base - emitter voltage	V_{BE}	V_{CE}= -12V, I_C= -2mA			-1	
DC current gain (Note1 and 2)	h_{FE}	V_{CE}= -12V, I_C= -2mA	100		320	
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0,f=1MHz		3.5		pF
Transition frequency	f_T	V_{CE}= -12V, I_C= -10mA		200		MHz

Note.1: Pulse test

Note.2: The 2SA1468 is grouped by h_{FE} as follows.

■ Classification of h_{fe}

Type	2SA1468-B	2SA1468-C
Range	100-200	160-320
Marking	INB	INC

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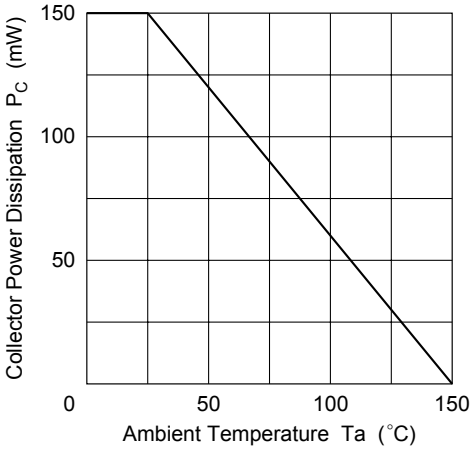
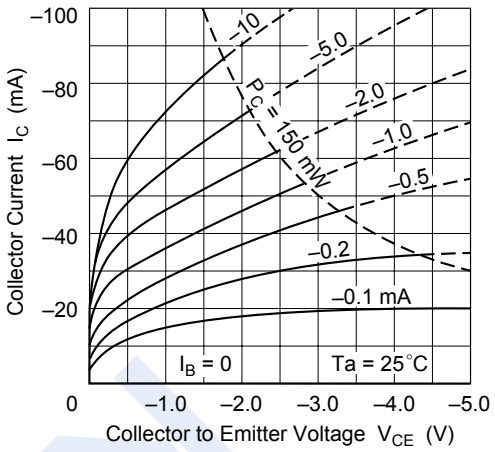
■ Typical Characterisitics

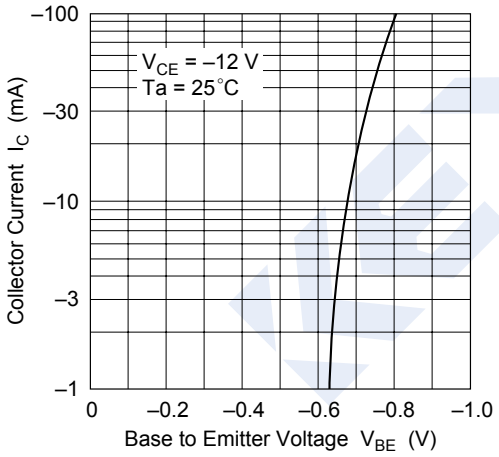
Maximum Collector Dissipation Curve



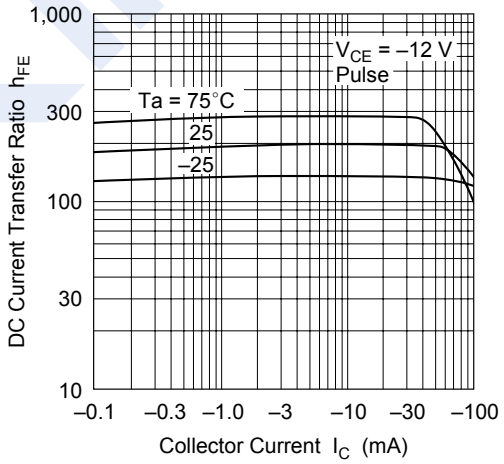
Typical Output Characteristics



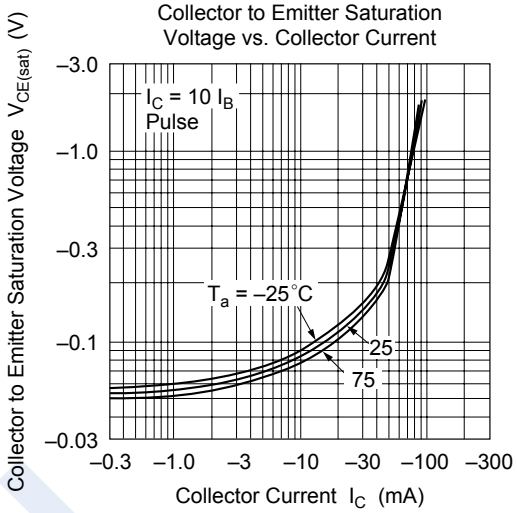
Typical Transfer Characteristics



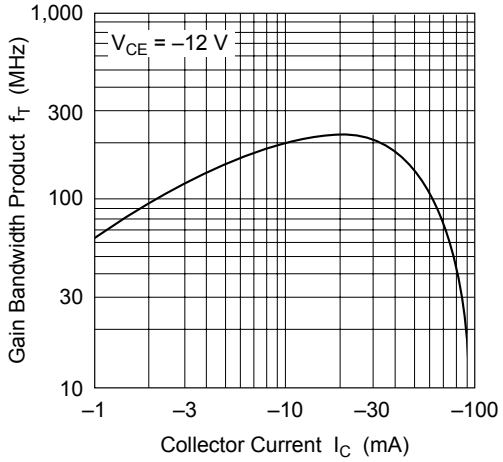
DC Current Transfer Ratio vs. Collector Current



Collector to Emitter Saturation Voltage vs. Collector Current



Gain Bandwidth Product vs. Collector Current



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■ Typical Characterisitics