

2SB1205

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector cutoff current	IcBO	V _{CB} = -20V , I _E = 0			-500	μA	
Emitter cutoff current	I _{EBO}	V _{EB} = -4V , I _C = 0			-500	μA	
DC current Gain	h _{FE}	V _{CE} = -2V , I _C = -500mA	100		400		
		V _{CE} = -2V , I _C = -4A	60				
Gain bandwidth product	f _T	V _{CE} = -5V , I _C = -200mA		320		MHz	
Output capacitance	C _{ob}	V _{CB} = -10V , f = 1MHz		60		pF	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -3A , I _B = -60mA		-250	-500	mV	
Base-to-emitter saturation voltage	V _{BE(sat)}	I _C = -3A , I _B = -60mA		-1	-1.3	V	
Collector-to-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA , I _E = 0	-25			V	
Collector-to-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA , R _{BE} = ∞	-20			V	
Emitter-to-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA , I _C = 0	-5			V	
Turn-on time	t _{on}	<p> $PW = 20\mu s$ $Duty\ Cycle \leq 1\%$ $I_C = -10mA$, $I_{B1} = 10mA$, $I_{B2} = -2mA$ Unit (resistance : Ω, capacitance : F) </p>		40		ns	
Storage time	t _{stg}				200		ns
Fall time	t _f				10		ns

■ hFE Classification

Rank	R	S	T
hFE	100~200	140~280	200~400