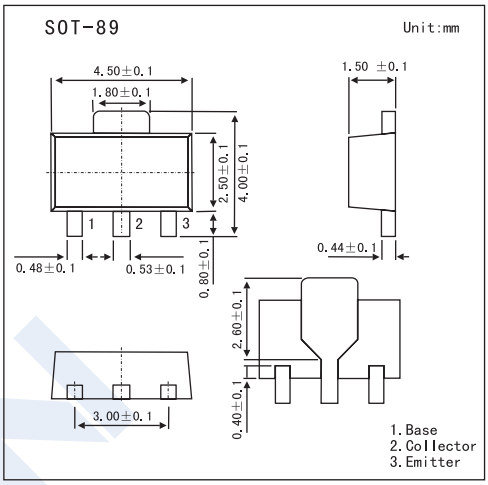
Voltage Amplifier Applications

2SA1201



■ Features

- High Voltage : V_{CEO} = -120V
- High Transition Frequency : f_T = 120MHz(typ.)
- Small Flat Package
- Complementary to 2SC2881

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	-120	V
Collector-Base Voltage	V_{CBO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-800	mA
Base Current	I_B	-160	mA
Collector Power Dissipation	P_C	500	mW
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Emitter Cut-off Current	I_{EBO}	V_{EB} = -5V , I_C = 0			-0.1	μA
Collector Cut-off Current	I_{CBO}	V_{CB} = -120V , I_E = 0			-0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = -10mA , I_B = 0	-120			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = -1mA , I_C = 0	-5			V
DC Current Gain	h_{FE}	V_{CE} = -5V , I_C = -100mA	80		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = -500mA , I_B = -50mA			-1.0	V
Base-Emitter Voltage	V_{BE}	V_{CE} = -5V , I_C = -500mA			-1.0	V
Transtion Frequency	f_T	V_{CE} = -5V , I_C = -100mA		120		MHz
Collector Output Capacitance	C_{ob}	V_{CB} = -10V , I_E = 0 , f = 1MHz			30	pF

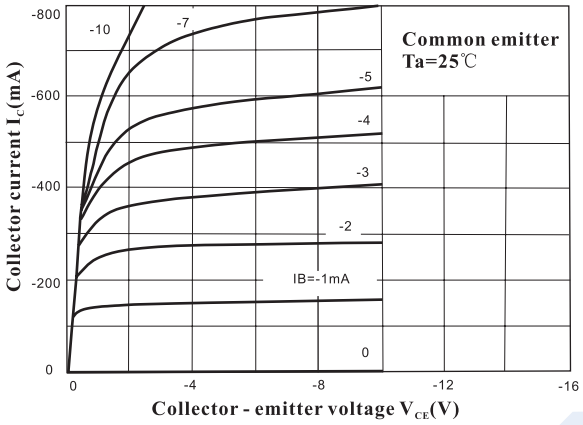
2SA1201

■ hFE Classification

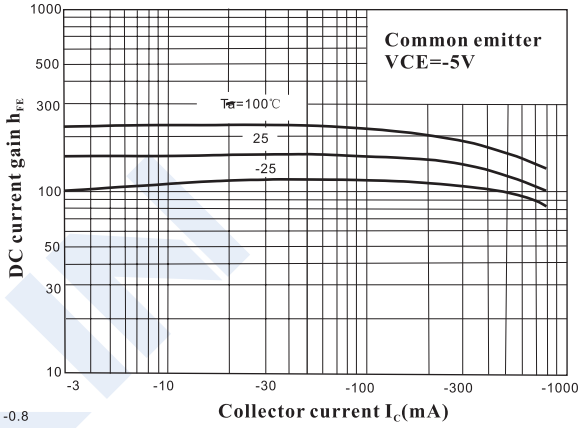
Marking	D	
Rank	O	Y
hFE	80～160	120～240

■ Electrical Characteristics Curves

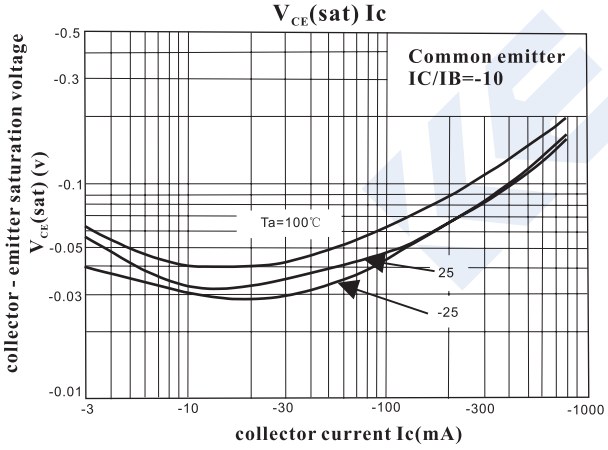
I_C - V_{CE}



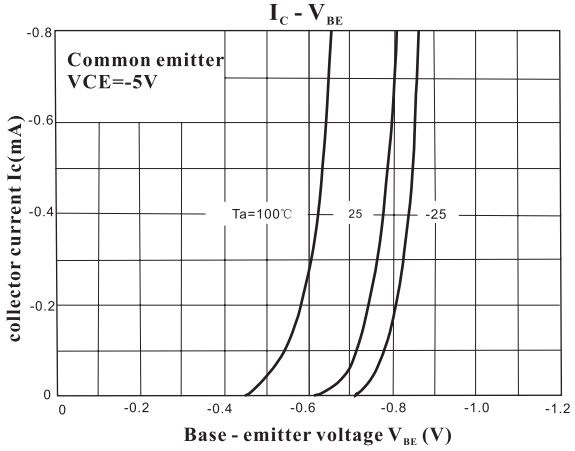
h_{FE} -I_C



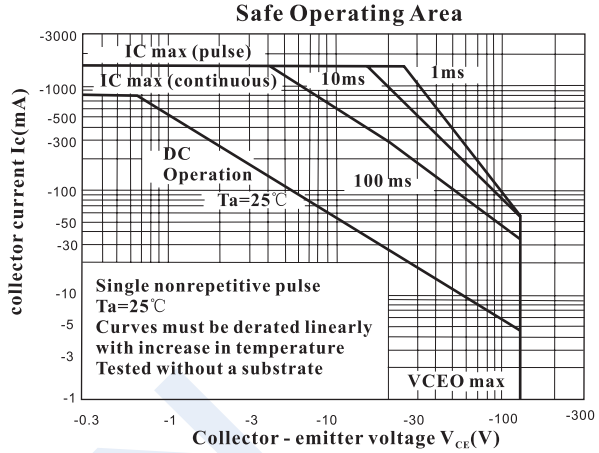
V_{CE}(sat) Ic



I_C - V_{BE}



Safe Operating Area



P_C - Ta