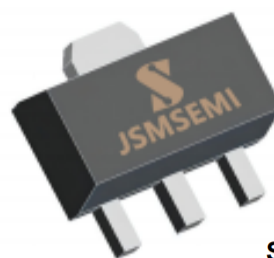


■ Features

- High Voltage : $V_{CEO} = 120V$
- High Transition Frequency : $f_T = 120MHz(typ.)$
- Small Flat Package
- Complementary to 2SA1201


SOT-89

1.BASE

2.COLLECTOR

3.EMITTER

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

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
	P_C^*	1000	
		150	$^{\circ}C$
Storage temperature	T_{stg}	-55 to +150	$^{\circ}C$

* Mounted on a ceramic substrate (250 mm² x 0.8 t)

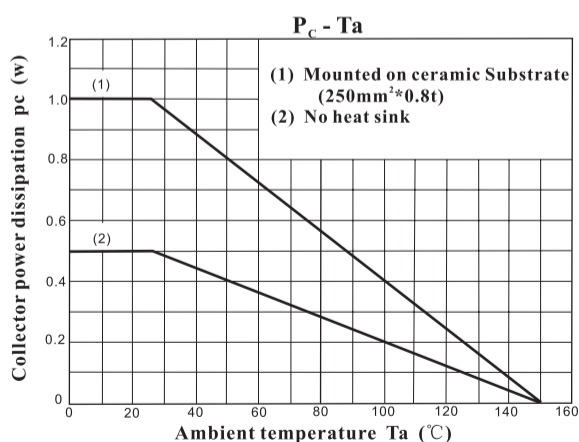
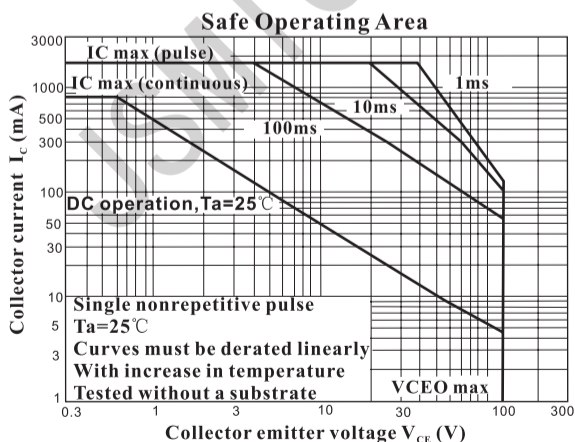
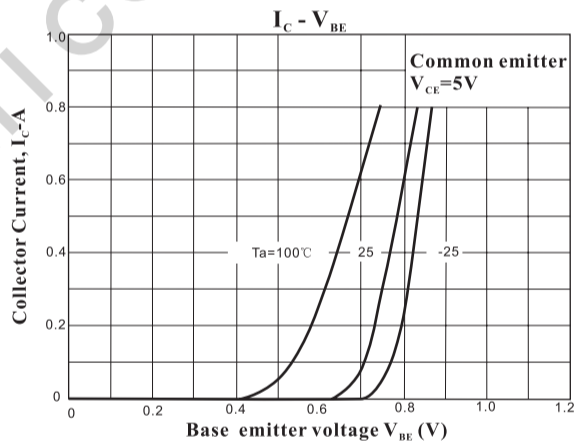
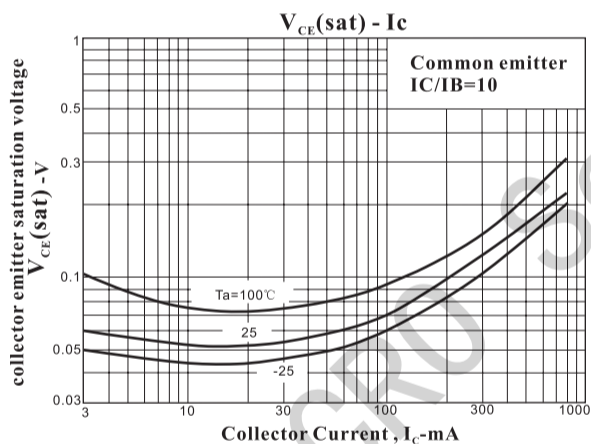
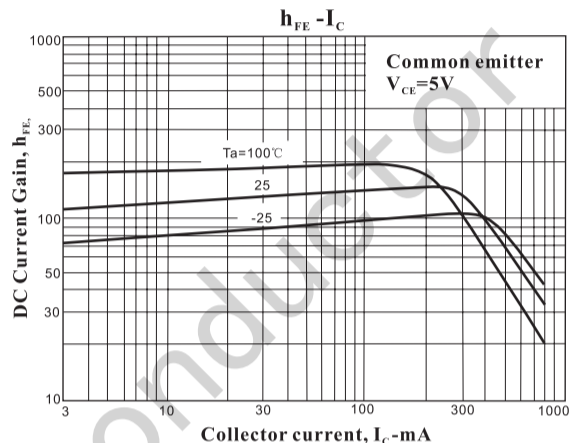
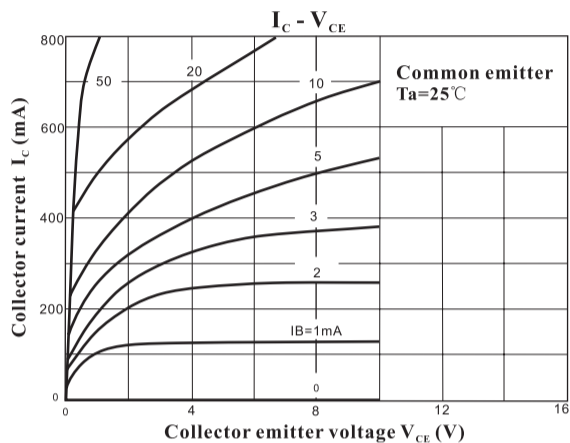
■ Electrical Characteristics $T_a = 25^{\circ}C$

Parameter	Symbol	Testconditions	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	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 500mA$			1	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

■ hFE Classification

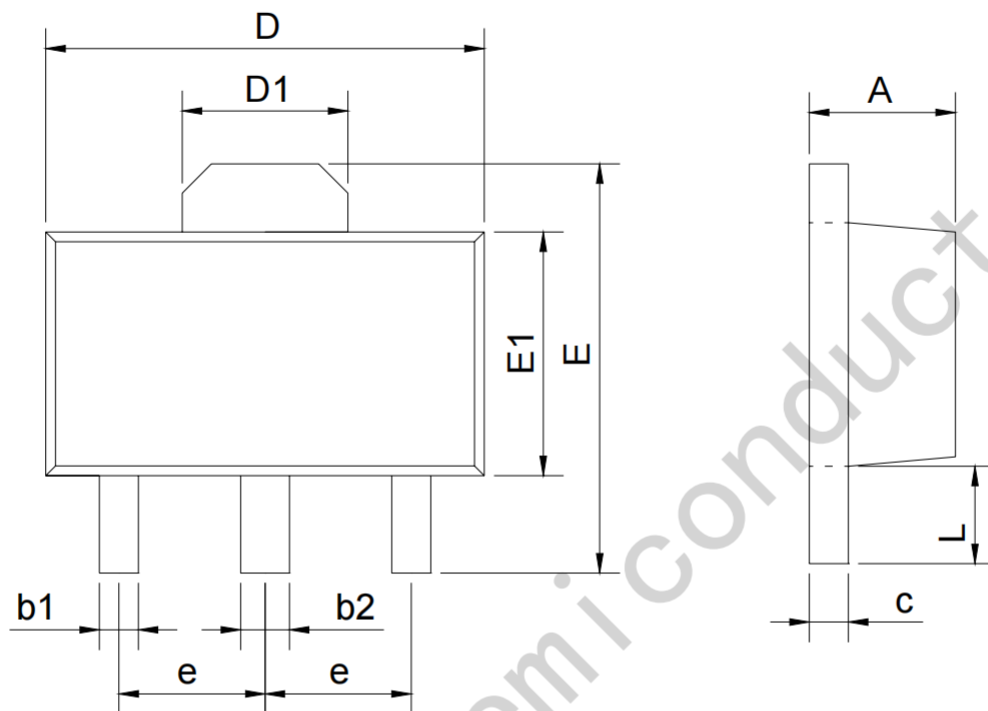
Rank	O	Y
hFE	80~160	120~240

■ Electrical Characteristics Curves



Package Information

SOT-89



SYMBOL	mm	
	min	max
A	1.40	1.60
b1	0.35	0.50
b2	0.45	0.60
c	0.36	0.46
D	4.30	4.70
D1	1.40	1.80
E	4.00	4.40
E1	2.30	2.70
e	1.50BSC	
L	0.80	1.20