DESCRIPTION

The 2SA1201-O & 2SA1201-Y are available in SOT-89 package.

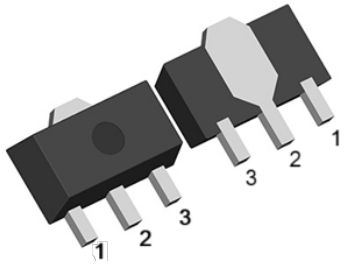
FEATURE

- High Voltage
- High transition frequency
- Complementary to 2SC2881

ORDERING INFORMATION

Package Type	Part Number
SOT-89	2SA1201-O
	2SA1201-Y
SPQ	1,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



SOT-89

PIN#	DESCRIPTION
1	Base
2	Collector
3	Emitter

H_{FE} CLASSIFICATION

Rank	Range
O	80 ~ 160
Y	120 ~ 240

ABSOLUTE MAXIMUM RATINGS

T_A = 25°C, unless otherwise specified.

V_{CBO}, Collector-Base Voltage	-120 V
V_{CEO}, Collector-Emitter Voltage	-120 V
V_{CBO}, Emitter-Base Voltage	-5 V
I_C, Collector Current-Continuous	-0.8 A
P_C, Collector Power Dissipation	0.5 W
T_J, Junction Temperature	150 °C
T_{stg}, Storage Temperature	-55 ~ +150 °C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A=25℃ unless otherwise specified.

Parameter	Symbols	Conditions	Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = -1 mA, I_E = 0	-120	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -10 mA, I_B = 0	-120	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = -1 mA, I_c = 0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB} = -120 V, I_E = 0	-	-	-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB} = -5 V, I_C = 0	-	-	-0.1	μA
DC current gain	h_{FE}	V_{CE} = -5 V, I_C = -100 mA	80	-	240	-
Collector-emitter saturation voltage	V_{CE} (sat)	I_C = -500 mA, I_B = -50 mA,	-	-	-1	V
Base-emitter voltage	V_{BE}	V_{CE} = -5 V, I_C = -500 mA	-	-	-1	V
Transition frequency	f_T	V_{CE} = -5 V, I_C = -100 mA	-	120	-	MHz
Collector output capacitance	C_{ob}	V_{CB} = -10 V, I_E = 0 f = 1 MHz	-	-	30	pF

TYPICAL CHARACTERISTICS

Fig 1. I_C - V_{CE}

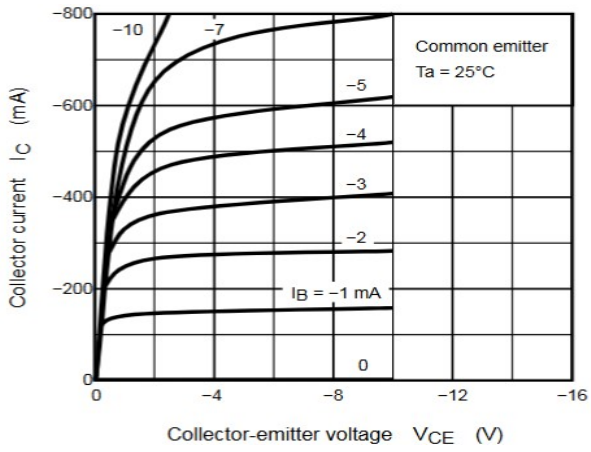


Fig 2. h_{FE} - I_C

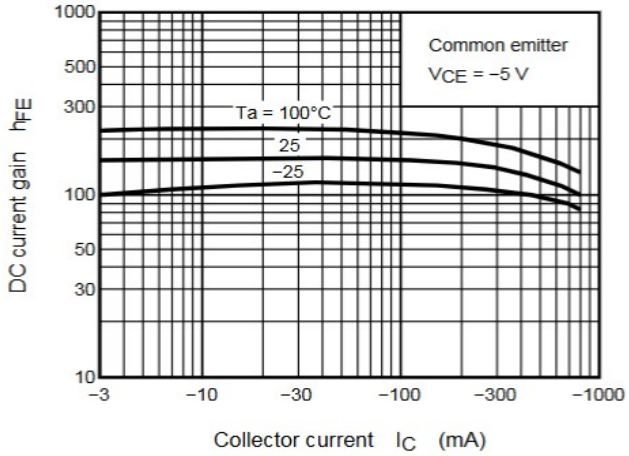


Fig 3. $V_{CE\ (sat)}$ - I_C

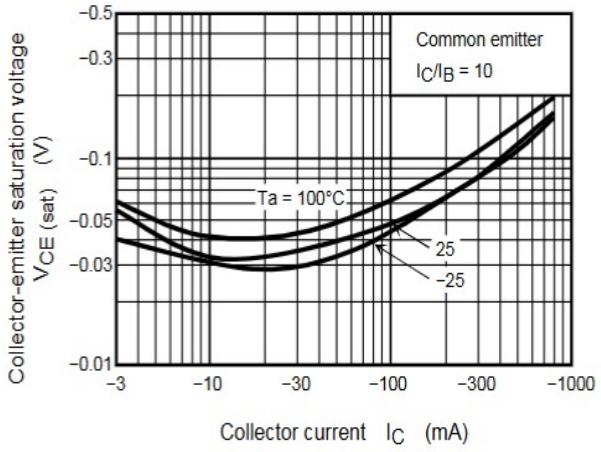


Fig 4. I_C - V_{BE}

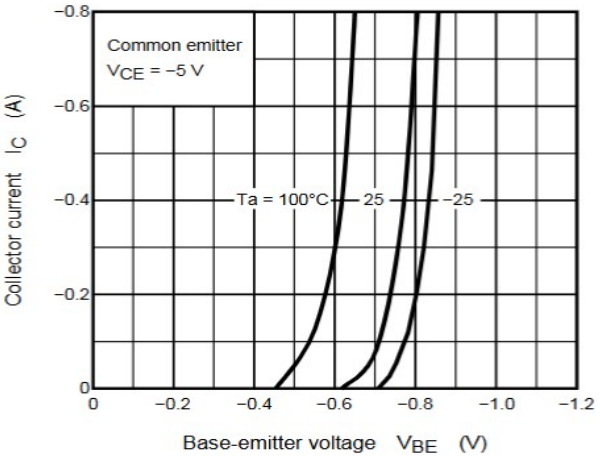


Fig 5. SAFE OPERATING AREA

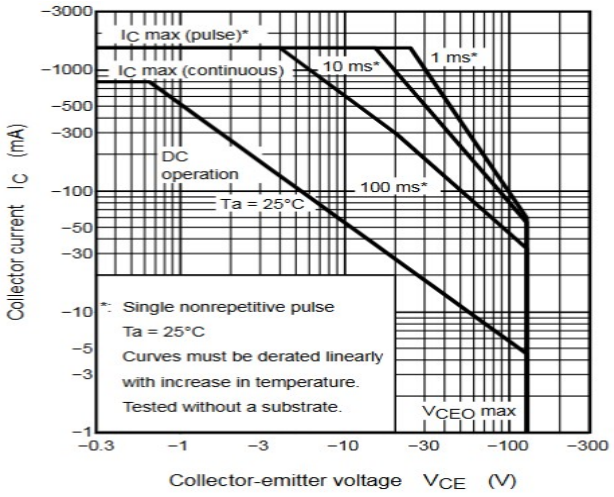
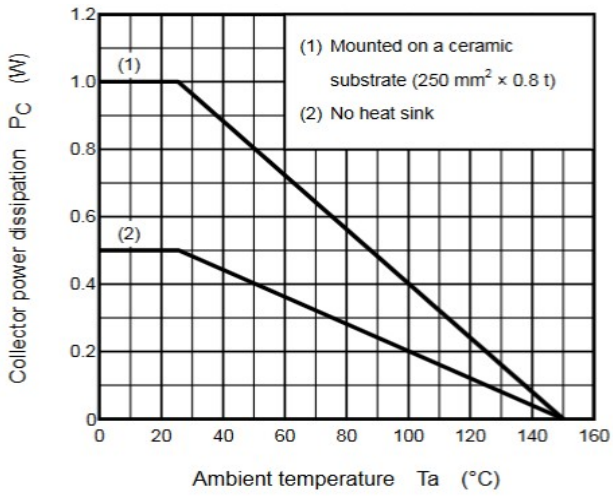
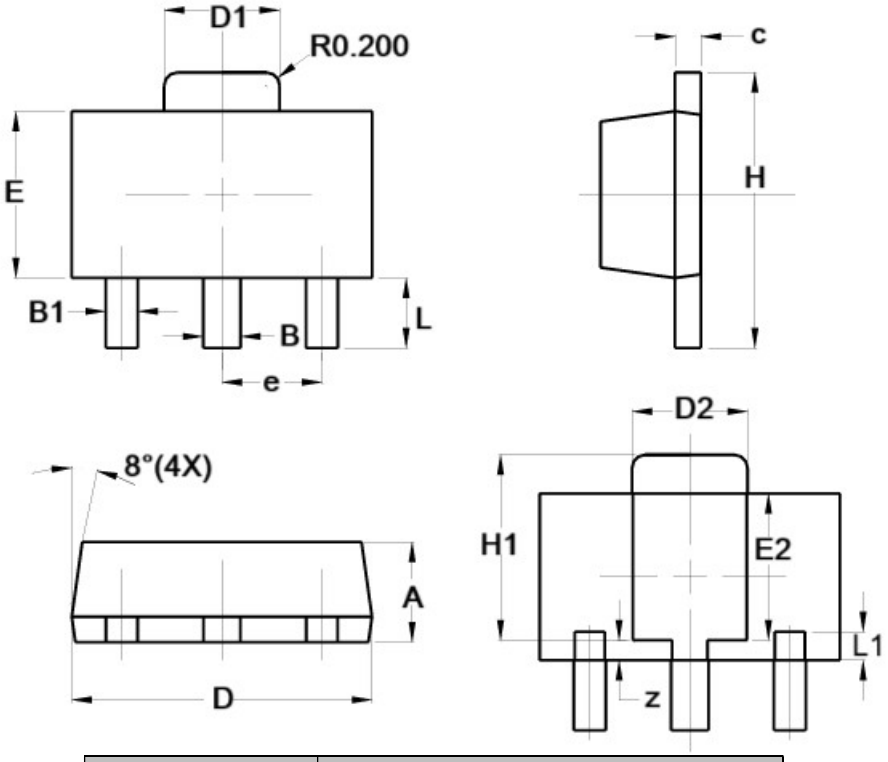


Fig 6. P_C - Ta



PACKAGE INFORMATION

Dimension in SOT-89 (Unit: mm)



Symbol	Millimeter	
	Min.	Max.
A	1.400	1.600
B	0.500	0.620
B1	0.420	0.540
c	0.350	0.430
D	4.440	4.600
D1	1.620	1.830
D2	1.610	1.810
E	2.400	2.600
E2	2.050	2.350
e	1.500 TYP.	
H	3.950	4.250
H1	2.630	2.930
L	0.900	1.200
L1	0.327	0.527
z	0.200	0.400

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