

2SC1212, 2SC1212A

Silicon NPN Epitaxial

HITACHI

Application

Low frequency power amplifier

Outline

TO-126 MOD



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Ratings		Unit
		2SC1212	2SC1212A	
Collector to base voltage	V_{CBO}	50	80	V
Collector to emitter voltage	V_{CEO}	50	80	V
Emitter to base voltage	V_{EBO}	4	4	V
Collector current	I_C	1	1	A
Collector power dissipation	P_C	0.75	0.75	W
	P_C^{*1}	8	8	W
Junction temperature	T_j	150	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	-55 to +150	$^\circ\text{C}$

Note: 1. Value at $T_C = 25^\circ\text{C}$

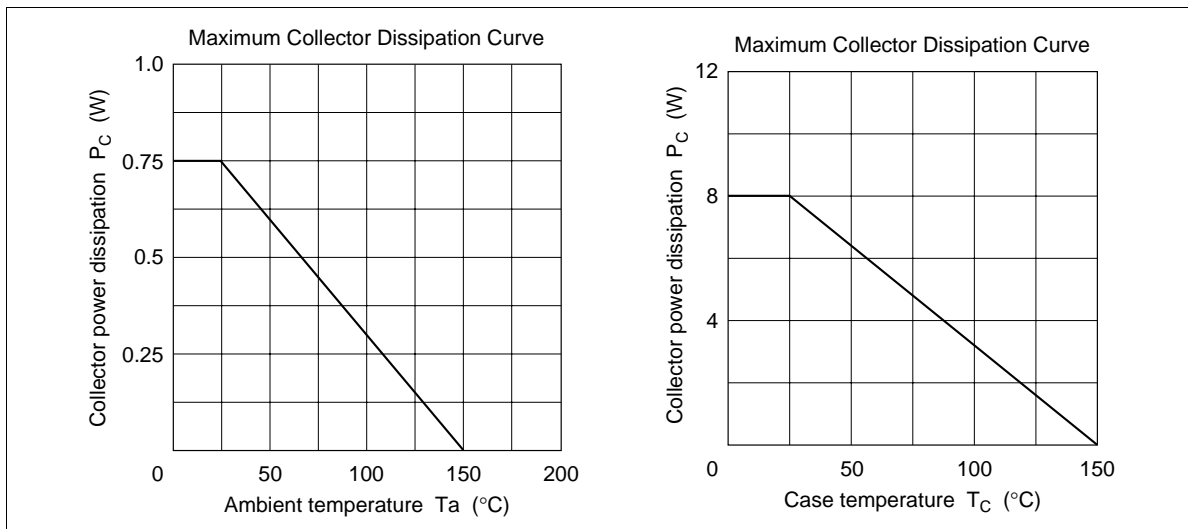
2SC1212, 2SC1212A

Electrical Characteristics (Ta = 25°C)

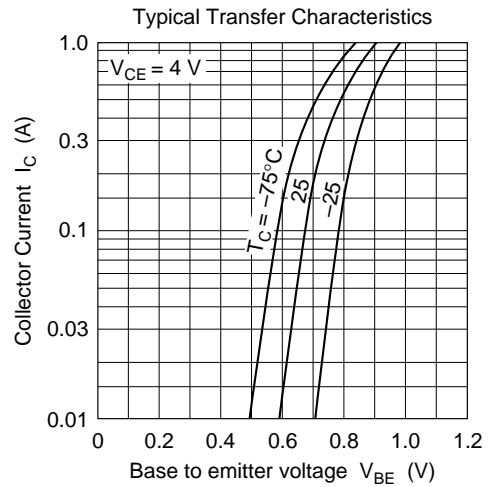
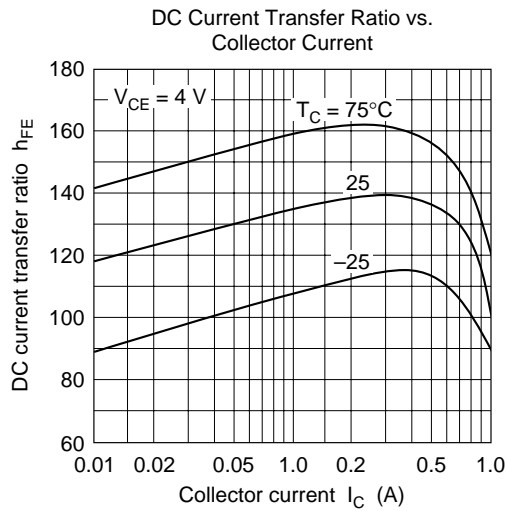
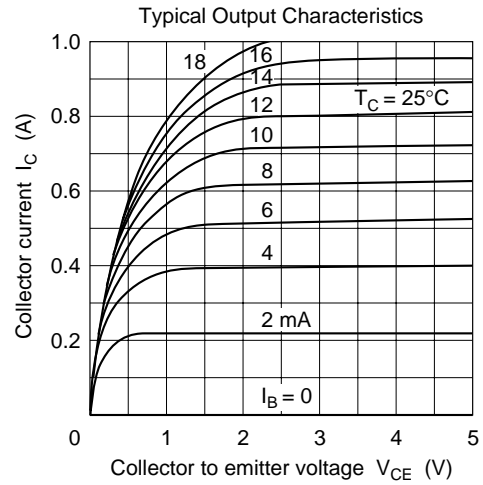
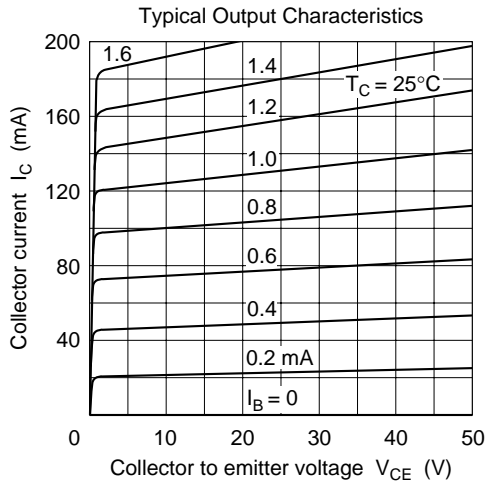
Item	Symbol	2SC1212			2SC1212A			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	$V_{(BR)CBO}$	50	—	—	80	—	—	V	$I_C = 1 \text{ mA}, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	50	—	—	80	—	—	V	$I_C = 10 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	4	—	—	4	—	—	V	$I_E = 1 \text{ mA}, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	5	—	—	5	μA	$V_{CB} = 50 \text{ V}, I_E = 0$
DC current transfer ratio	h_{FE}^{*1}	60	—	200	60	—	200		$V_{CE} = 4 \text{ V}, I_C = 50 \text{ mA}$
	h_{FE}	20	—	—	20	—	—		$V_{CE} = 4 \text{ V}, I_C = 1 \text{ A}$ (pulse test)
Base to emitter voltage	V_{BE}	—	0.65	1.0	—	0.65	1.0	V	$V_{CE} = 4 \text{ V}, I_C = 50 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	0.75	1.5	—	0.75	1.5	V	$I_C = 1 \text{ A}, I_B = 0.1 \text{ A}$ (pulse test)
Gain bandwidth product	f_T	—	160	—	—	160	—	MHz	$V_{CE} = 4 \text{ V}, I_C = 30 \text{ mA}$

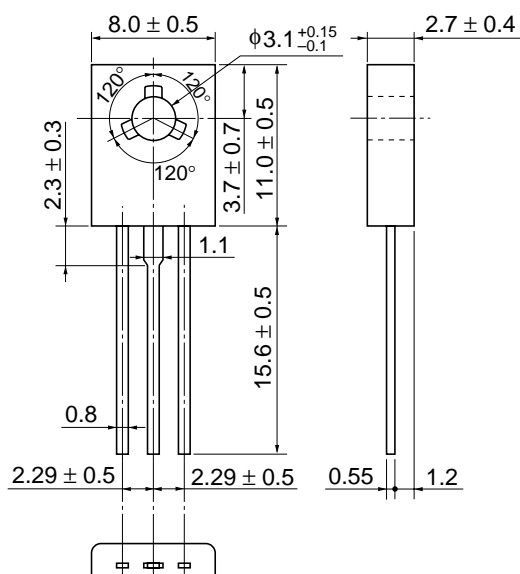
Note: 1. The 2SC1212 and 2SC1212A are grouped by h_{FE} as follows.

B	C
60 to 120	100 to 200



2SC1212, 2SC1212A





Unit: mm

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