

2SC1212, 2SC1212A

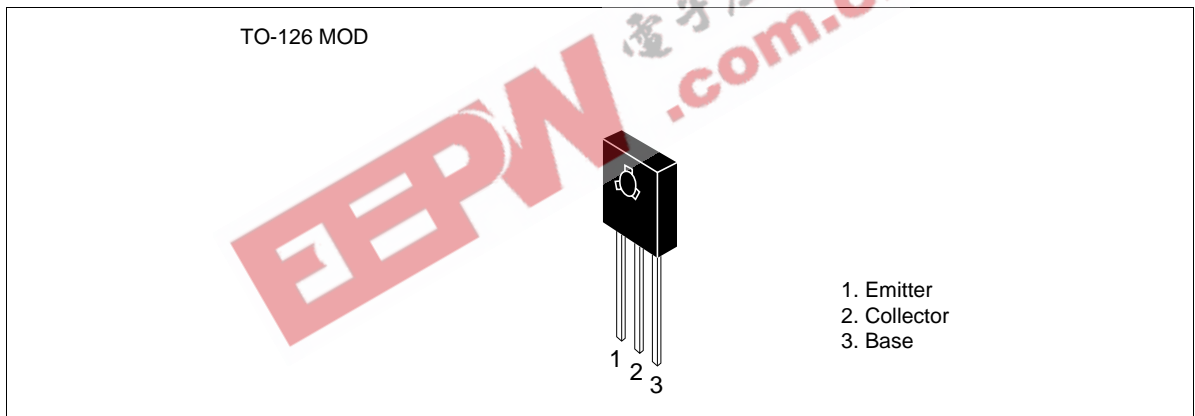
Silicon NPN Epitaxial

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Application

Low frequency power amplifier

Outline



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 $T_{\text{c}} = 25^\circ\text{C}$

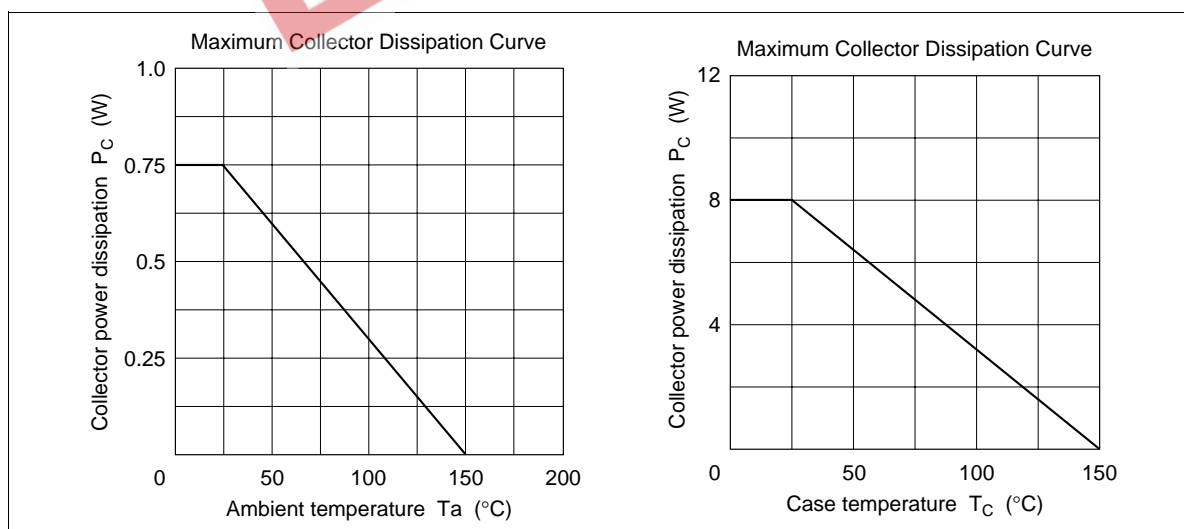
2SC1212, 2SC1212A

Electrical Characteristics (T_a = 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 mA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	50	—	—	80	—	—	V	I _C = 10 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	4	—	—	4	—	—	V	I _E = 1 mA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	5	—	—	5	μA	V _{CB} = 50 V, I _E = 0
DC current transfer ratio	h _{FE} *1	60	—	200	60	—	200		V _{CE} = 4 V, I _C = 50 mA
	h _{FE}	20	—	—	20	—	—		V _{CE} = 4 V, I _C = 1 A (pulse test)
Base to emitter voltage	V _{BE}	—	0.65	1.0	—	0.65	1.0	V	V _{CE} = 4 V, I _C = 50 mA
Collector to emitter saturation voltage	V _{CE(sat)}	—	0.75	1.5	—	0.75	1.5	V	I _C = 1 A, I _B = 0.1 A (pulse test)
Gain bandwidth product	f _T	—	160	—	—	160	—	MHz	V _{CE} = 4 V, I _C = 30 mA

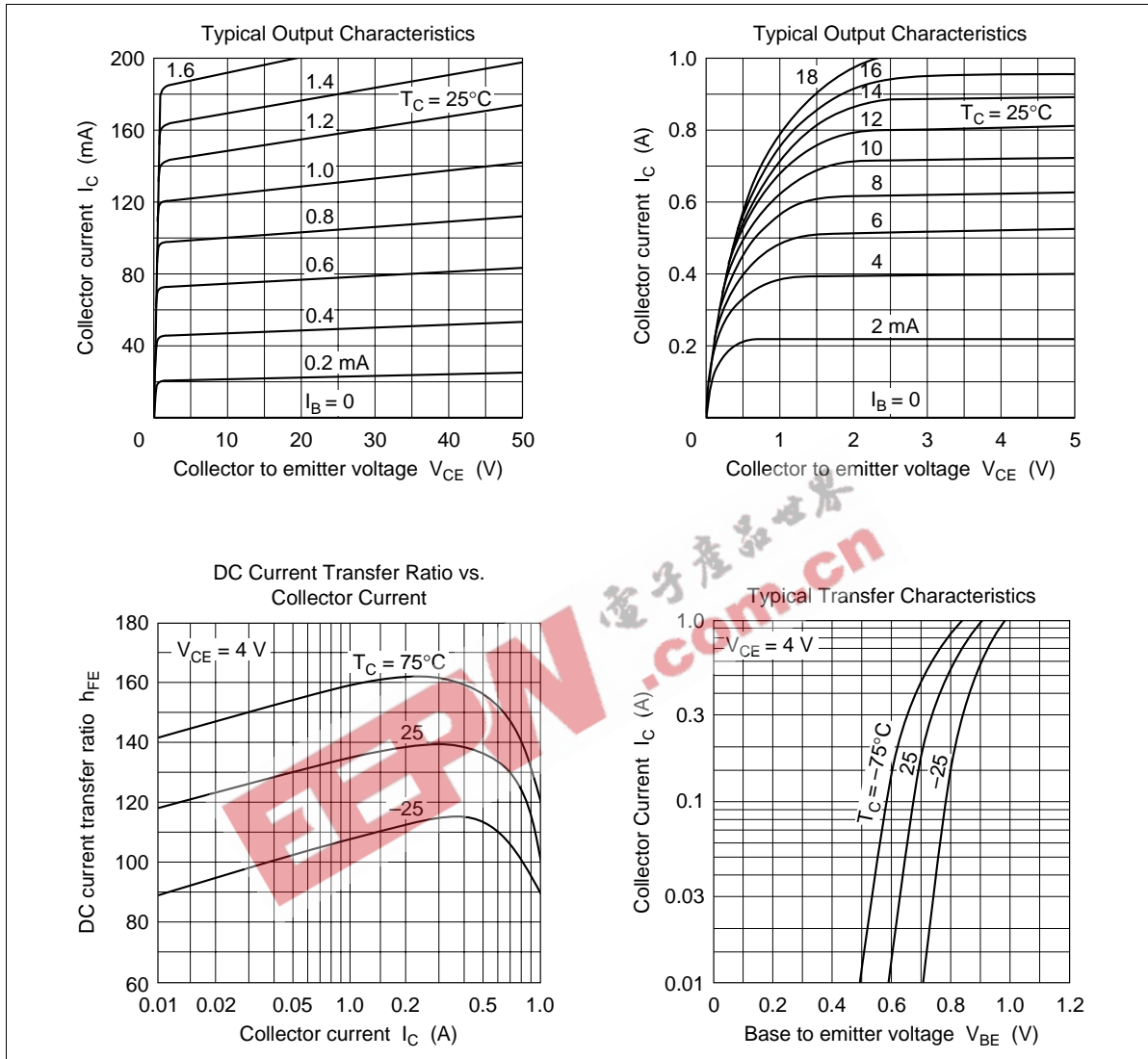
Note: 1. The 2SC1212 and 2SC1212A are grouped by h_{FE} as follows.

B	C
60 to 120	100 to 200



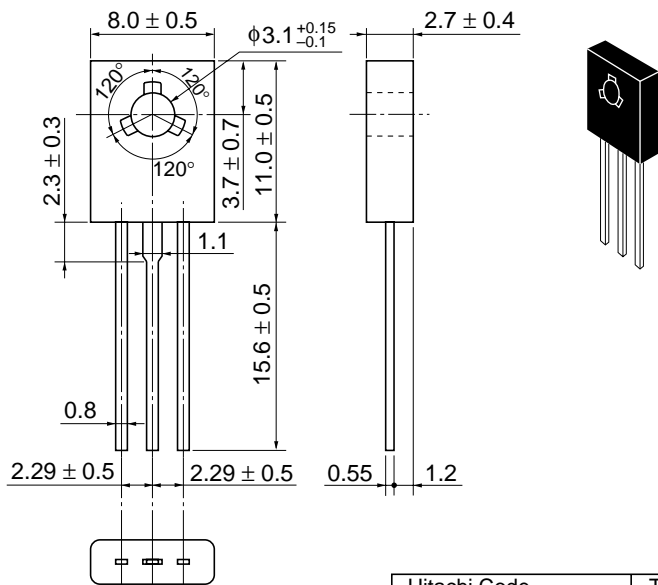
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Unit: mm



Hitachi Code	TO-126 Mod
JEDEC	—
EIAJ	—
Weight (reference value)	0.67 g

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