

2SA743, 2SA743A

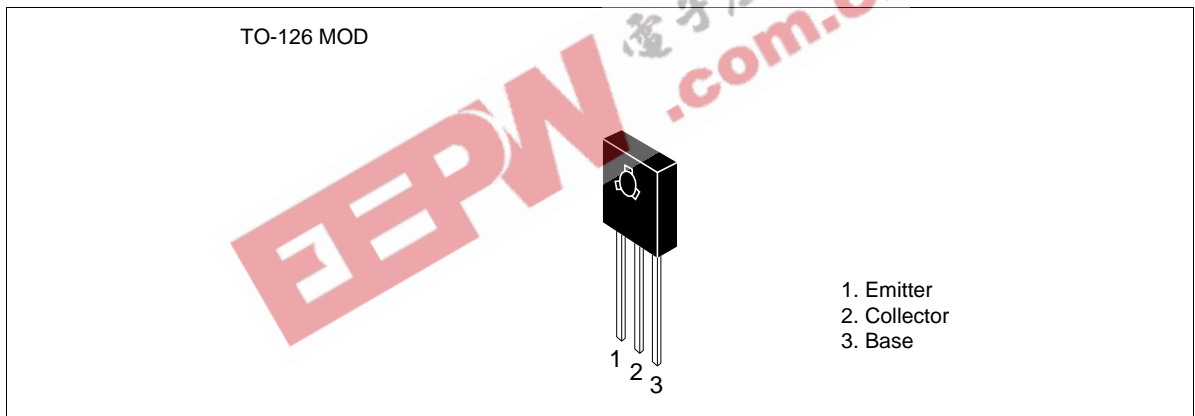
Silicon PNP Epitaxial

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Application

Low frequency power amplifier complementary pair with 2SC1212 and 2SC1212A

Outline



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

Item	Symbol	Ratings		Unit
		2SA743	2SA743A	
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	
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 $T_{\text{c}} = 25^\circ\text{C}$.

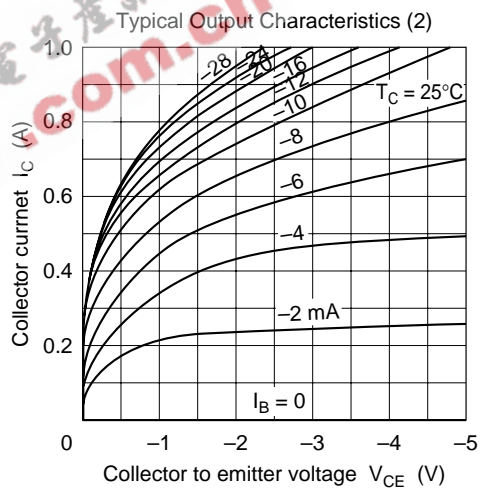
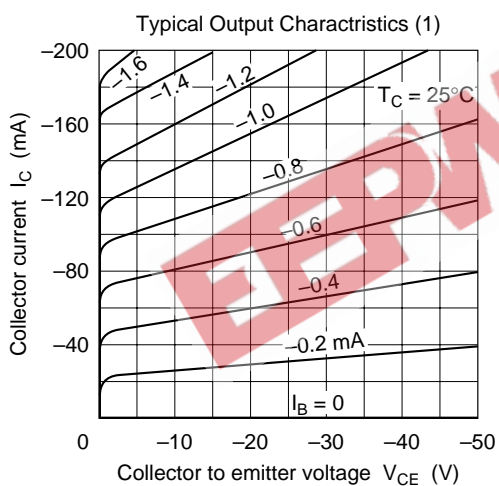
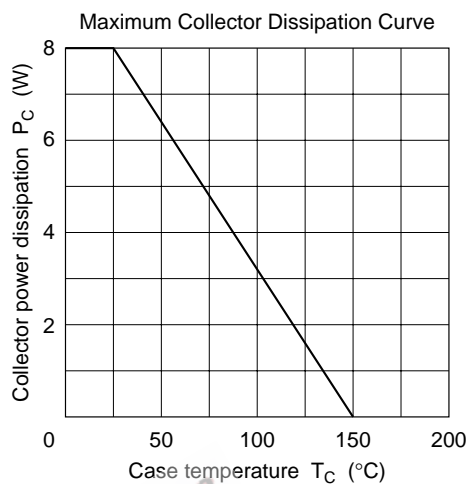
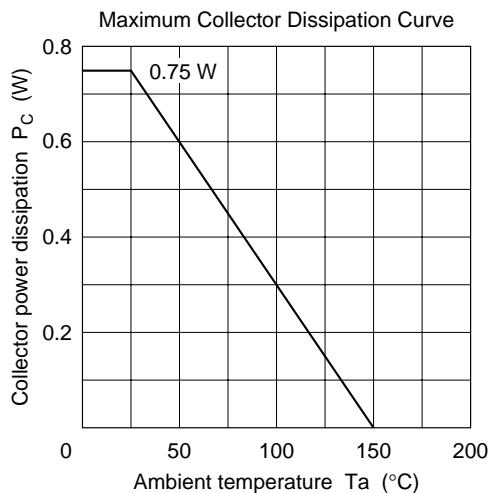
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Electrical Characteristics (T_a = 25°C)

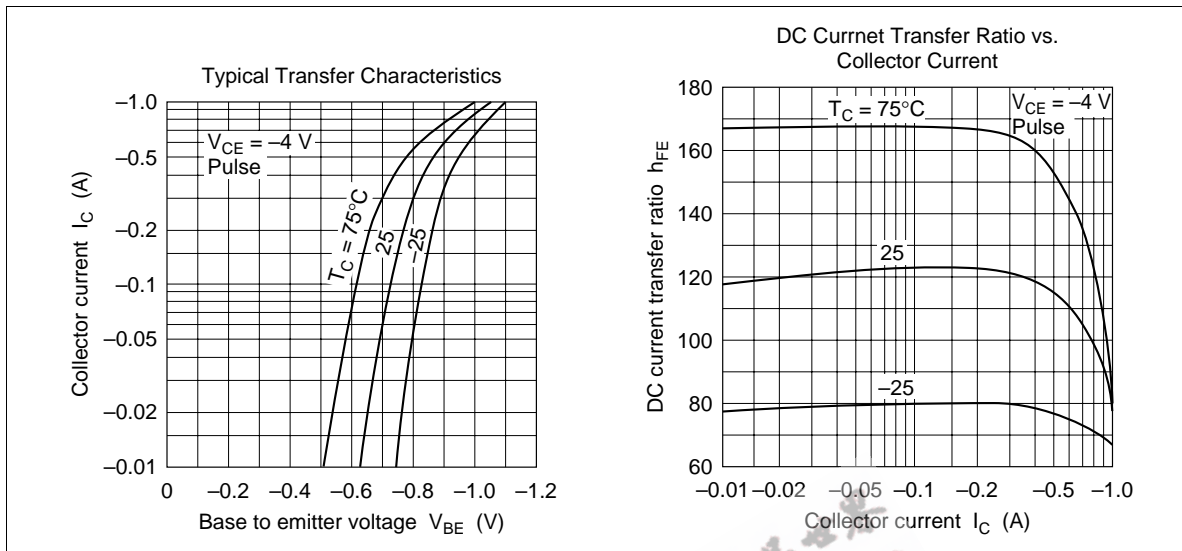
Item	Symbol	2SA743			2SA743A			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	V _{(BR)CBO}	-50	—	—	-80	—	—	V	I _C = -1 mA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	-50	—	—	-80	—	—	V	I _C = -10 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	-4	—	—	-4	—	—	V	I _E = -1 mA, I _C = 0
Collector cutoff current	I _{CER}	—	—	-20	—	—	—	μA	V _{CE} = -50 V, R _{BE} = 1 kΩ
	I _{CER}	—	—	—	—	—	-20		V _{CE} = -80 V, R _{BE} = 1 kΩ
DC current transfer ratio	h _{FE} ^{*1}	60	120	200	60	120	200		V _{CE} = -4 V, I _C = -50 mA
	h _{FE}	20	—	—	20	—	—		V _{CE} = -4 V, I _C = -1 A (pulse)
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
Gain bandwidth product	f _T	—	120	—	—	120	—	MHz	V _{CE} = -4 V, I _C = -30 mA

Note: 1. The 2SA743 and 2SA743A is grouped by h_{FE} as follows.

B	C
60 to 120	100 to 200



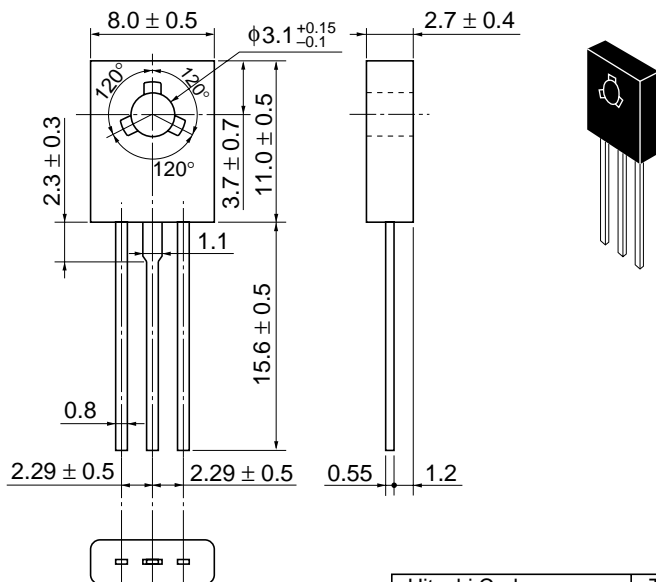
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EPW 电子产品世界 .com.cn

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Unit: mm



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

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