

2SB715, 2SB716, 2SB716A

Silicon PNP Epitaxial

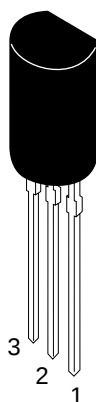
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Application

- Low frequency high voltage amplifier
- Complementary pair with 2SD755, 2SD756 and 2SD756A

Outline

TO-92MOD



1. Emitter
2. Collector
3. Base

2SB715, 2SB716, 2SB716A

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	2SB715	2SB716	2SB716A	Unit
Collector to base voltage	V _{CBO}	−100	−120	−140	V
Collector to emitter voltage	V _{CEO}	−100	−120	−140	V
Emitter to base voltage	V _{EBO}	−5	−5	−5	V
Collector current	I _C	−50	−50	−50	mA
Collector power dissipation	P _C	750	750	750	mW
Junction temperature	T _j	150	150	150	°C
Storage temperature	T _{stg}	−55 to +150	−55 to +150	−55 to +150	°C

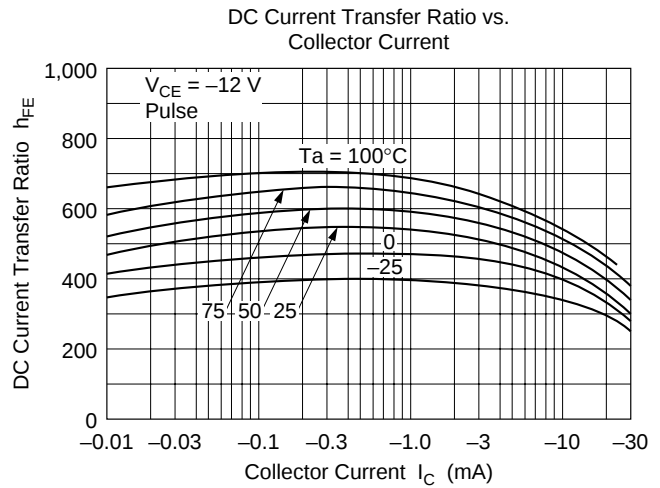
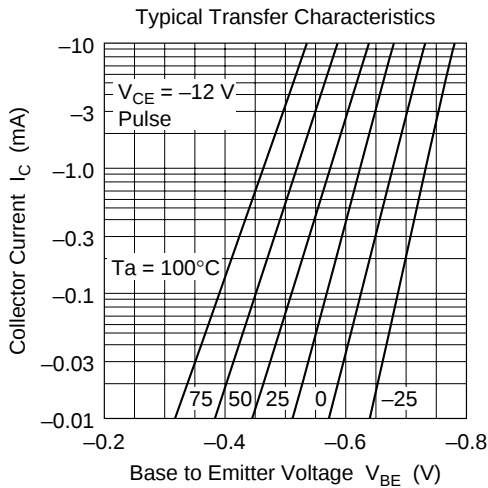
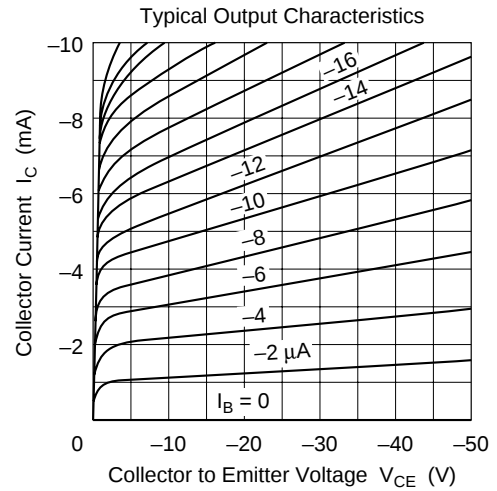
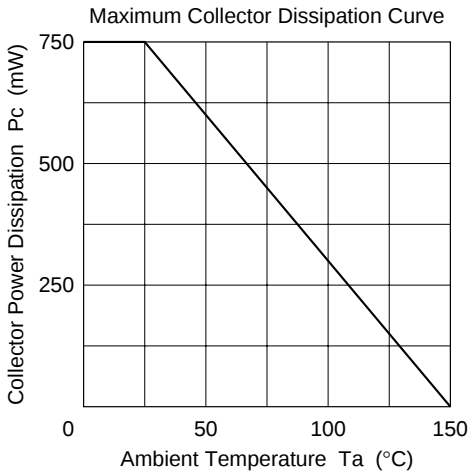
Electrical Characteristics (Ta = 25°C)

Item	Symbol	2SB715			2SB716			2SB716A			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	V _{(BR)CBO}	−100	—	—	−120	—	—	−140	—	—	V	I _C = −10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	−100	—	—	−120	—	—	−140	—	—	V	I _C = −1 mA, R _{BE} = ∞
Collector cutoff current	I _{CBO}	—	—	−0.5	—	—	—	—	—	—	μA	V _{CB} = −80 V, I _E = 0
		—	—	—	—	—	−0.5	—	—	−0.5	μA	V _{CB} = −100 V, I _E = 0
DC current transfer ratio	h _{FE1} *1	250	—	800	250	—	800	250	—	500		V _{CE} = −12 V, I _C = −2 mA
	h _{FE2}	125	—	—	125	—	—	125	—	—		V _{CE} = −12 V, I _C = −10 mA
Base to emitter voltage	V _{BE}	—	—	−0.75	—	—	−0.75	—	—	−0.75	V	V _{CE} = −12 V, I _C = −2 mA
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	−0.2	—	—	−0.2	—	—	−0.2	V	I _C = −10 mA, I _B = −1 mA
Gain bandwidth product	f _T	—	150	—	—	150	—	—	150	—	MHz	V _{CE} = −12 V, I _C = −5 mA
Collector output capacitance	Cob	—	1.8	—	—	1.8	—	—	1.8	—	pF	V _{CB} = −25 V, I _E = 0, f = 1 MHz

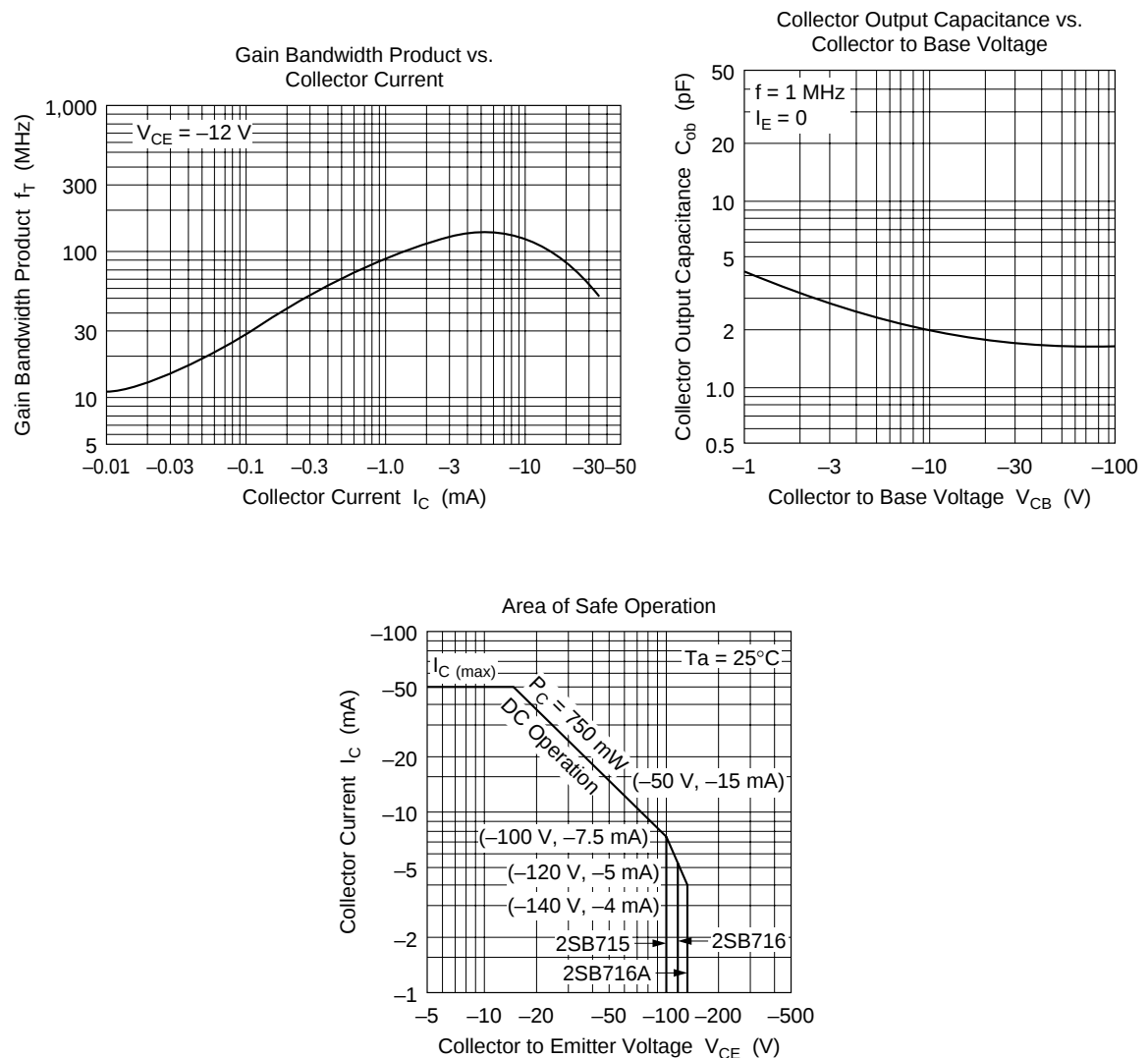
Note: 1. The 2SB715, 2SB716 and 2SB716A are grouped by h_{FE1} as follows.

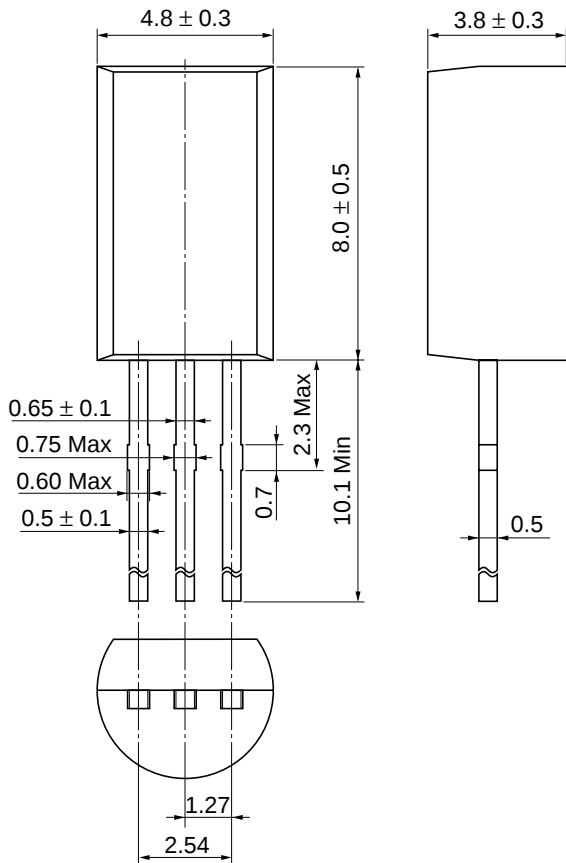
	D	E
2SB715, 2SB716	250 to 500	400 to 800
2SB716A	250 to 500	—

2SB715, 2SB716, 2SB716A



2SB715, 2SB716, 2SB716A





Hitachi Code	TO-92 Mod
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.35 g

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