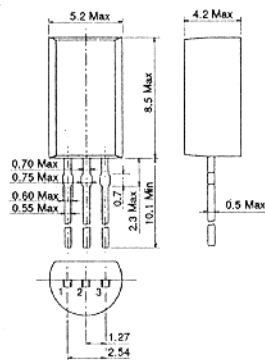


2SB715, 2SB716, 2SB716A

SILICON PNP EPITAXIAL

LOW FREQUENCY HIGH VOLTAGE AMPLIFIER

Complementary pair with 2SD755, 2SD756
and 2SD756A



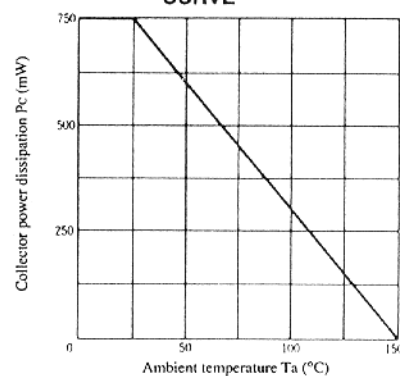
1. Emitter
 2. Collector
 3. Base
- (Dimensions in mm)

(JEDEC TO-92 MOD.)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB715	2SB716	2SB716A	Unit
Collector to base voltage	V _{CB0}	-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

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

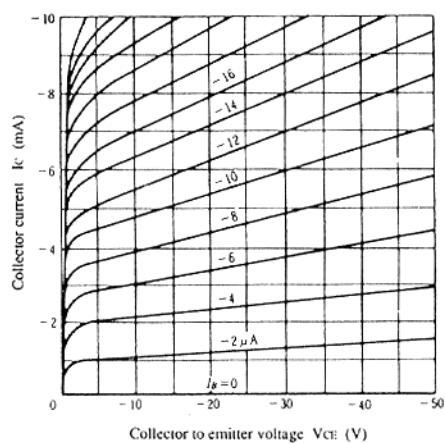
Item	Symbol	Test Condition	2SB715			2SB716			2SB716A			Unit
			min.	typ.	max.	min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-100	—	—	-120	—	—	-140	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-100	—	—	-120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

* The 2SB715, 2SB716 and 2SB716A are grouped by h_{FE} as follows.

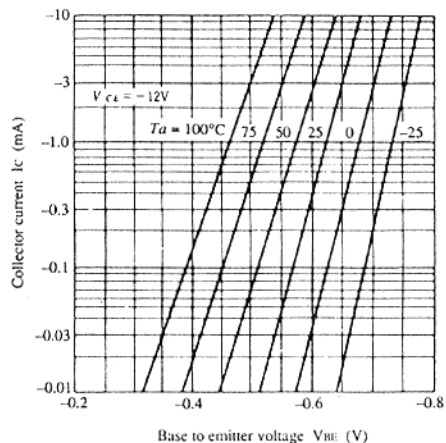
	D	E
2SB715, 2SB716	250 to 500	400 to 800
2SB716A	250 to 500	—

2SB715, 2SB716, 2SB716A

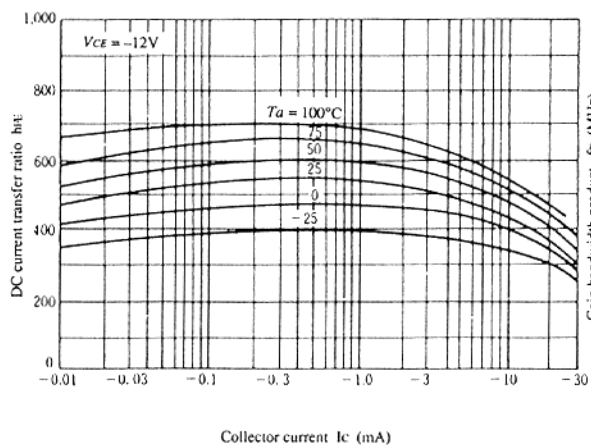
TYPICAL OUTPUT CHARACTERISTICS



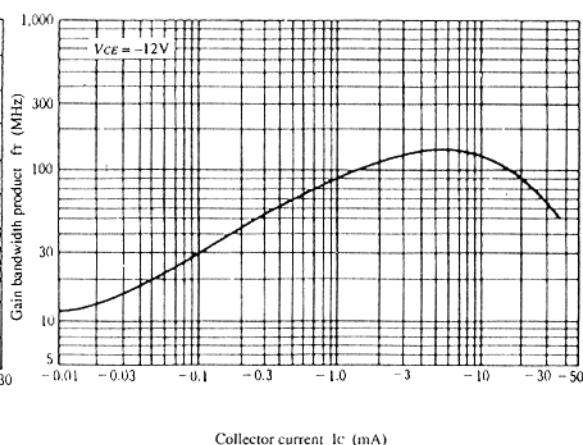
TYPICAL TRANSFER CHARACTERISTICS



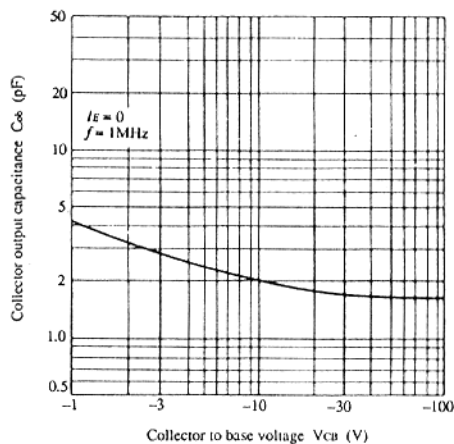
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE



AREA OF SAFE OPERATION

