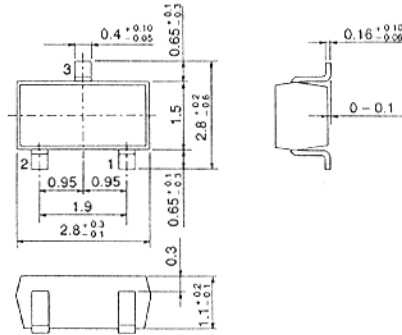


2SA1566

SILICON PNP EPITAXIAL
LOW FREQUENCY AMPLIFIER



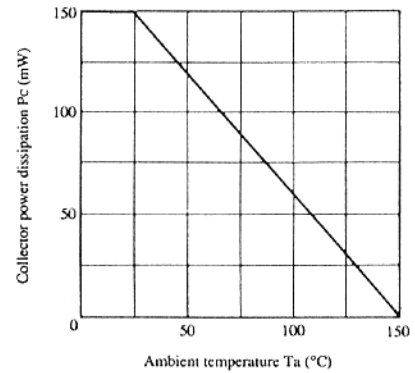
1. Emitter
 2. Base
 3. Collector
- (Dimensions in mm)

(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SA1566	Unit
Collector to base voltage	V _{CB0}	-120	V
Collector to emitter voltage	V _{CE0}	-120	V
Emitter to base voltage	V _{EB0}	-5	V
Collector current	I _c	-100	mA
Collector power dissipation	P _c	150	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

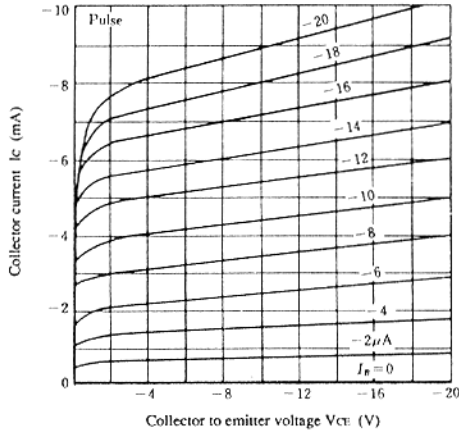
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _c = -10μA, I _E = 0	-120	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _c = -1mA, R _{BE} = ∞	-120	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _c = 0	-5	—	—	V
Collector cutoff current	I _{CB0}	V _{CB} = -70V, I _E = 0	—	—	-0.1	μA
Emitter cutoff current	I _{EB0}	V _{EB} = -2V, I _c = 0	—	—	-0.1	μA
DC current transfer ratio	h _{FE} *	V _{CE} = -12V, I _c = -2mA**	250	—	800	
Collector to emitter saturation voltage	V _{CE(sat)}	I _c = -10mA, I _B = -1mA**	—	—	-0.1	V
Base to emitter saturation voltage	V _{BE(sat)}	I _c = -10mA, I _B = -1mA**	—	—	-1.0	V

* The 2SA1566 is grouped by h_{FE} as follows.

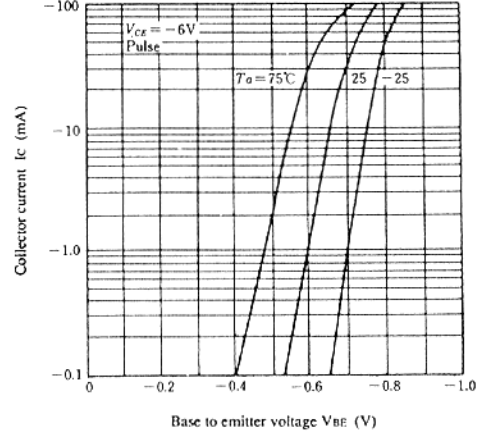
** Pulse Test

Grade	D	E
Mark	J1D	J1E
h _{FE}	250 to 500	400 to 800

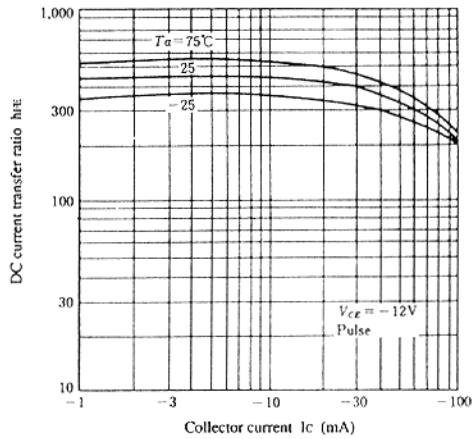
TYPICAL OUTPUT CHARACTERISTICS



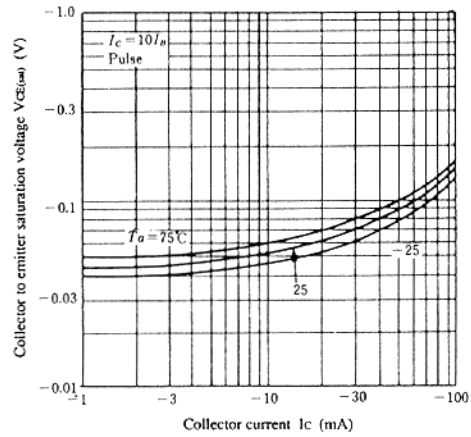
TYPICAL TRANSFER CHARACTERISTICS



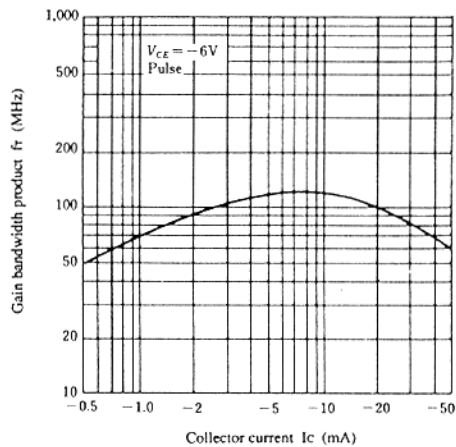
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE

