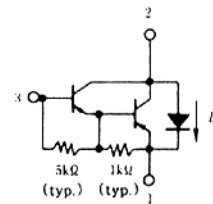
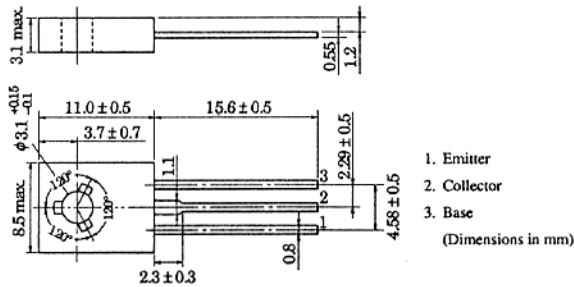


2SB1012(K)

SILICON PNP EPITAXIAL
 LOW FREQUENCY POWER AMPLIFIER
 COMPLEMENTARY PAIR WITH 2SD1376(K)



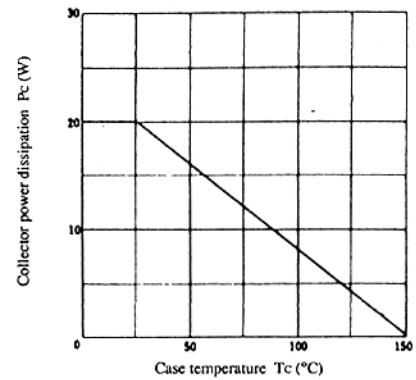
(JEDEC TO-126 MOD.)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SB1012(K)	Unit
Collector to base voltage	VCBO	-120	V
Collector to emitter voltage	VCEO	-120	V
Emitter to base voltage	VEBO	-7	V
Collector current	IC	-1.5	A
Collector peak current	IC(peak)	-3.0	A
Collector power dissipation	PC*	20	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C
C to E diode forward current	ID*	1.5	A

* Value at Tc = 25°C

MAXIMUM COLLECTOR DISSIPATION CURVE

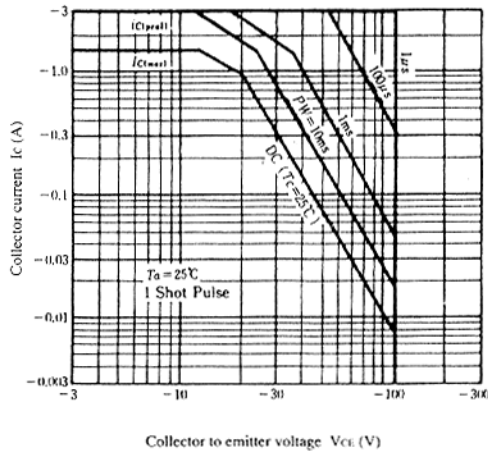


■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

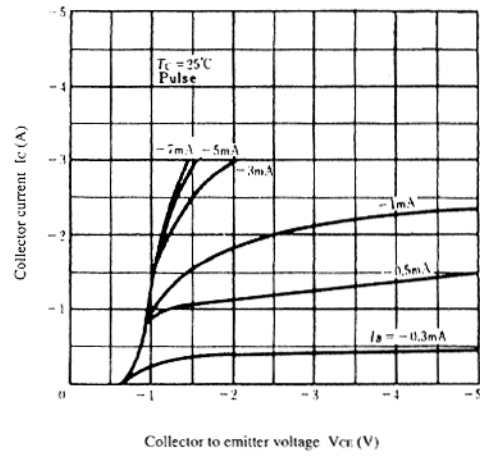
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to emitter breakdown voltage	V(BR)CEO	IC = -10mA, RBE = ∞	-120	—	—	V
Emitter to base breakdown voltage	V(BR)EBO	IE = -50mA, IC = 0	-7	—	—	V
Collector cutoff current	ICBO	VCB = -120V, IE = 0	—	—	-100	μA
	ICEO	VCE = -100V, RBE = ∞	—	—	-10	μA
DC current transfer ratio	hFE	VCE = -3V, IC = -1A*	2000	—	30000	
Collector to emitter saturation voltage	VCE(sat)1	IC = -1A, IB = -1mA*	—	—	-1.5	V
	VCE(sat)2	IC = -1.5A, IB = -1.5mA*	—	—	-2.0	V
Base to emitter saturation voltage	VBE(sat)1	IC = -1A, IB = -1mA*	—	—	-2.0	V
	VBE(sat)2	IC = -1.5A, IB = -1.5mA*	—	—	-2.5	V
C to E diode forward voltage	VD	ID = 1.5A*	—	—	3.0	V
Turn on time	ton	IC = -1A, IB1 = -IB2 = -1mA	—	0.5	—	μs
Turn off time	toff		—	2.0	—	μs

* Pulse Test

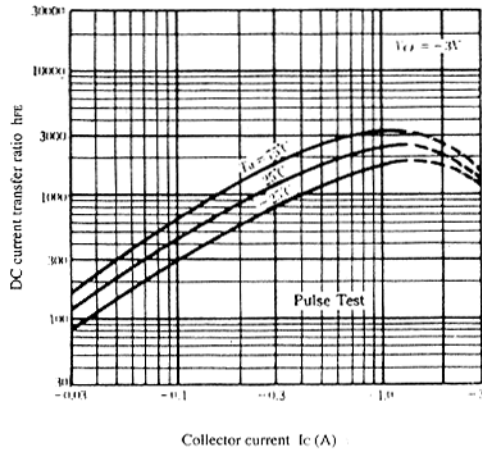
AREA OF SAFE OPERATION



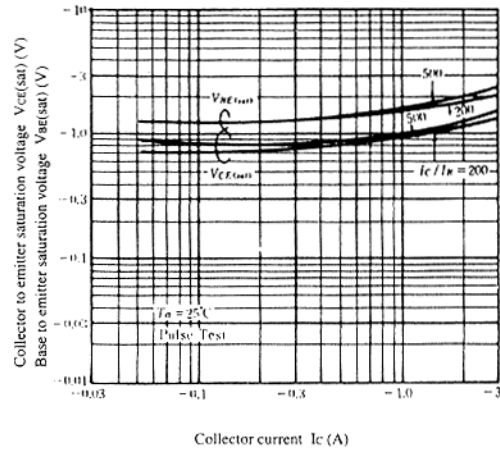
TYPICAL OUTPUT CHARACTERISTICS



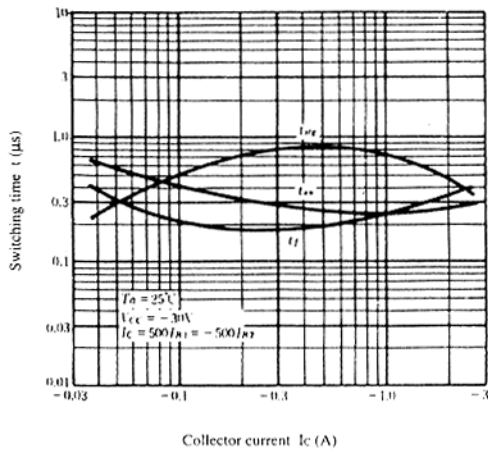
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



SATURATION VOLTAGE VS. COLLECTOR CURRENT



SWITCHING TIME VS. COLLECTOR CURRENT



TRANSIENT THERMAL RESISTANCE

