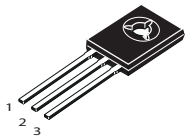
2SB776 PNP Epitaxial Planar Transistors
2SD886 NPN Epitaxial Planar Transistors

Lead(Pb)-Free

TO-126

1.EMITTER
2.COLLECTOR
3.BASE



ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Rating	Symbol	PNP/2SB776	NPN/2SD886	Unit
Collector-Emitter Voltage	V_{CEO}	-50	50	V
Collector-Base Voltage	V_{CBO}	-50	50	V
Emitter-Base Voltage	V_{EBO}	-5.0	5.0	V
Collector Current	I_C	-3.0	3.0	A
Total Cevice Disspation Ta=25°C	P_D	1.0		W
Junction Temperature	T_J	+150		
Storage Temperture	Tstg	-55 to +150		°C

Device Marking

2SB776=B776 , 2SD886=D886

ELECTORICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Unit
Collect-Emitter Breakdown Voltage (I_C=-5/5 mA, I_B=0)	$V_{(BR)CEO}$	-50/50	-	V
Collect-Base Breakdown Voltage (I_C=-100/100 μA, I_E=0)	$V_{(BR)CBO}$	-50/50	-	V
Emitter-Base Breakdown Voltage (I_E=-100/100 μA, I_C=0)	$V_{(BR)EBO}$	-5.0/5.0	-	V
Collector Cutoff Current (V_{CB}=-50/50 V, I_E=0)	I_{CBO}	-	-1.0/1.0	μA
Emitter Cutoff Current (V_{EB}=-3.0/3.0Vdc, I_C=0)	I_{EBO}	-	-1.0/1.0	μA

ELECTRICAL CHARACTERISTICS (T_A=25˚C unless otherwise noted) (Countinued)

Characteristics	Symbol	Min	TYP	Max	Unit

ON CHARACTERISTICS

DC Current Gain* (I_C= -1.0/1.0 A, V_{CE}=-2.0/2.0V)	h_{FE} (1)	100	-	400	-
DC Current Gain* (I_C= -20/20 mA, V_{CE}= -2.0/2.0 V)	h_{FE} (2)	100	-	-	-
Collector-Emitter Saturation Voltage (I_C= -2.0/2.0 A , I_B= -0.2/0.2A)	$V_{CE(sat)}$	-	-	-0.5/0.5	V
Base-Emitter Saturation Voltage (I_C= -2.0/2.0 A , I_B= -0.2/0.2A)	$V_{BE(sat)}$	-	-	-2.0/2.0	V
Transition Frequency (I_C= -0.1/0.1 mA , V_{CE}=-5.0/5.0 V , f=10MHz)	f_T	-	80	-	MHz
Collector Output Capacitance (I_E=0, V_{CB}=10V, f=1MHz)	C_{ob}	-	45	-	pF

* Pulse Test

Typical Characteristics
2SB776

Fig.1 Static characteristics

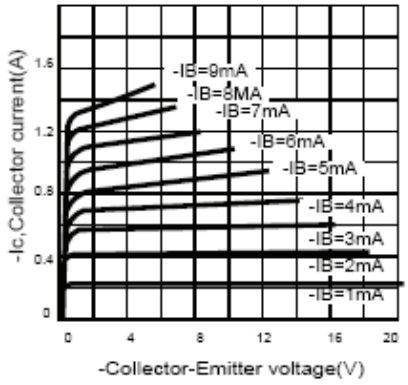


Fig.2 Derating curve of safe operating areas

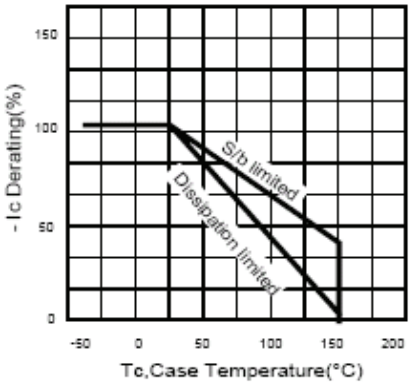


Fig.3 Power Derating

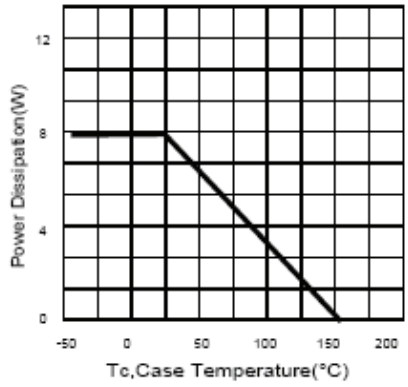


Fig.4 Collector Output capacitance

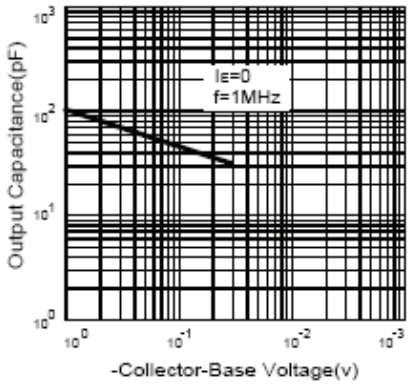


Fig.5 Current gain-bandwidth product

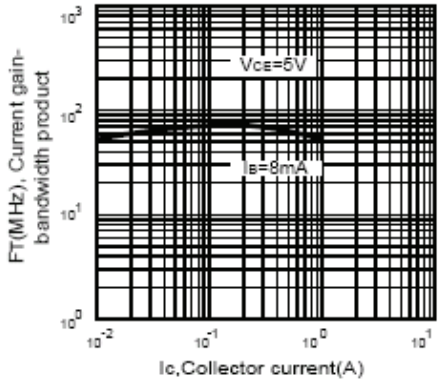


Fig.6 Safe operating area

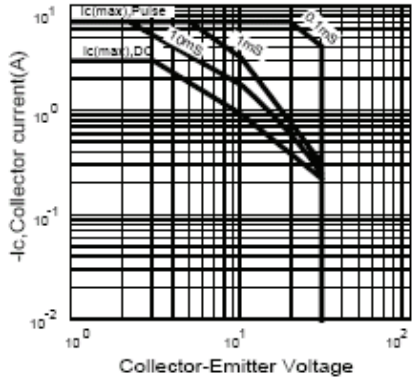


Fig.7 DC current gain

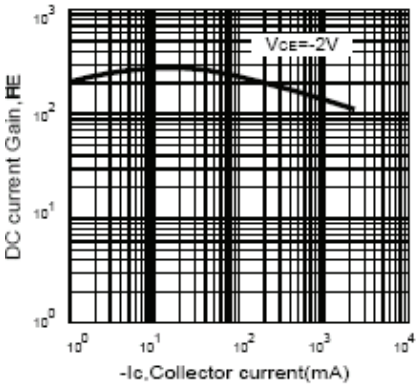
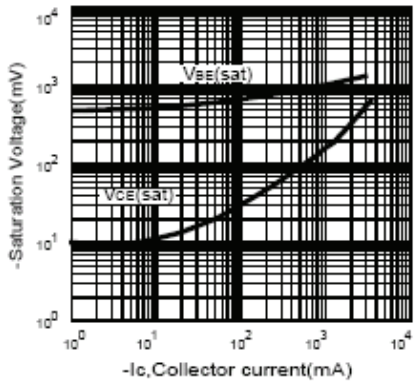


Fig.8 Saturation Voltage



Typical Characteristics
2SD886

Fig.1 Static characteristics

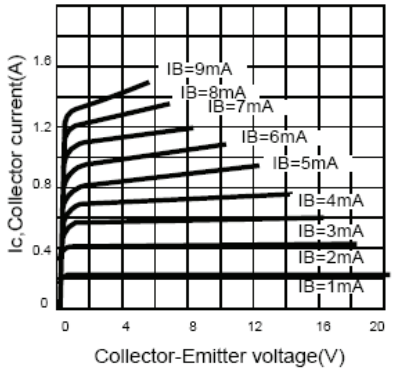


Fig.2 Derating curve of safe operating areas

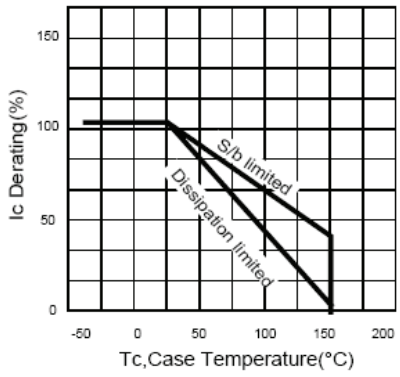


Fig.3 Power Derating

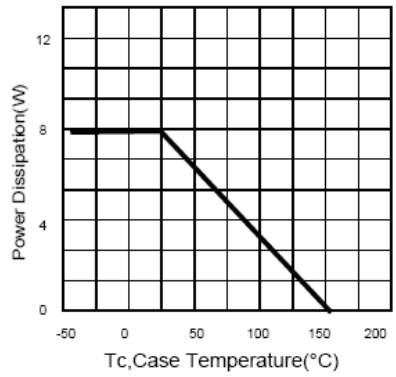


Fig.4 Collector Output capacitance

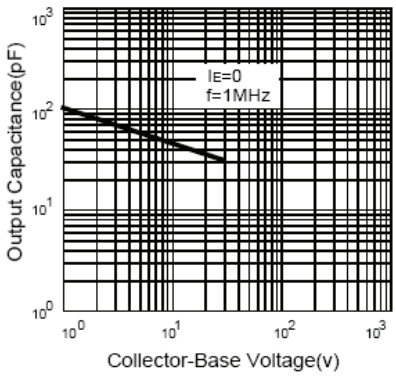


Fig.5 Current gain-bandwidth product

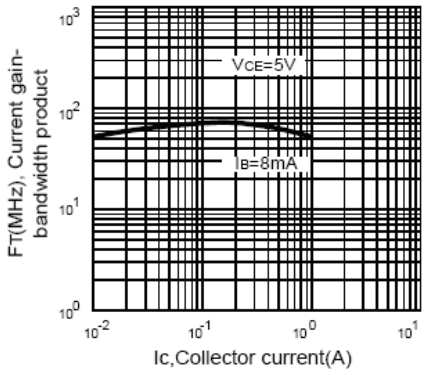


Fig.6 Safe operating area

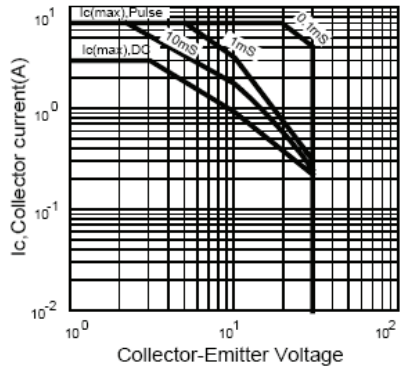


Fig.7 DC current gain

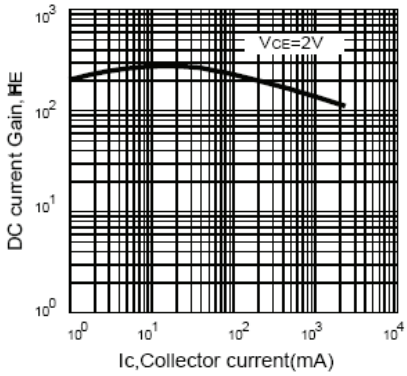
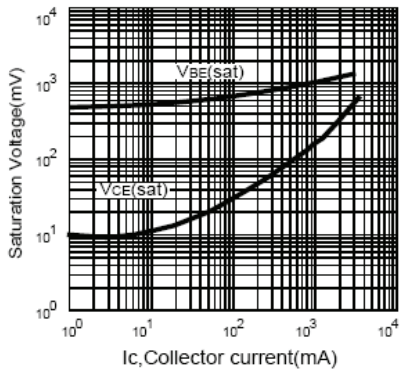
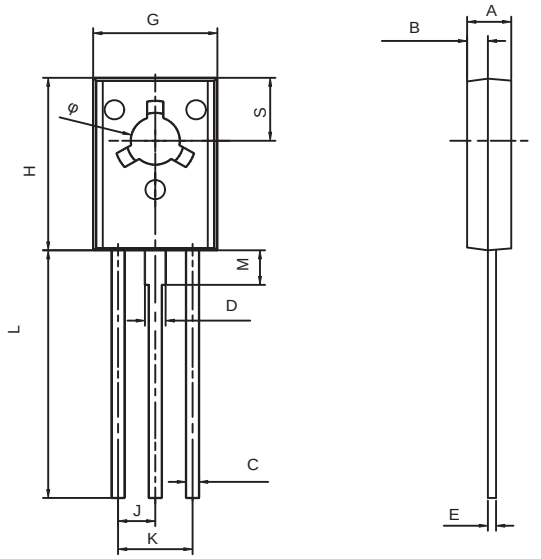


Fig.8 Saturation Voltage



TO-126 Outline Dimensions

unit:mm



TO-126		
Dim	Min	MAX
A	2.500	2.900
B	1.100	1.500
C	0.660	0.860
D	1.170	1.370
E	0.450	0.600
G	7.400	7.800
H	10.600	11.000
J	2.290TYP	
K	4.480	4.680
L	15.300	15.700
M	2.100	2.300
S	3.900	4.100
φ	3.000	3.200