

/ Descriptions

TO-126F NPN Silicon NPN transistor in a TO-126F Plastic Package.

/ Features

$V_{CE(sat)}$, 2SA885 3W
Low $V_{CE(sat)}$, 3W output in complementary pair with 2SA885.

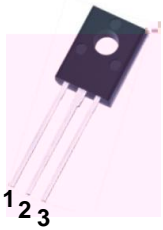
/ Applications

Medium power amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	85 170	120 240	170 340

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	45	V
Collector to Emitter Voltage	V_{CEO}	35	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	1.0	A
Collector Current – Continuous(Pulse)	I_{CP}	1.5	A
Collector Power Dissipation	* P_C	1.2	W
Collector Power Dissipation	** P_C	5	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

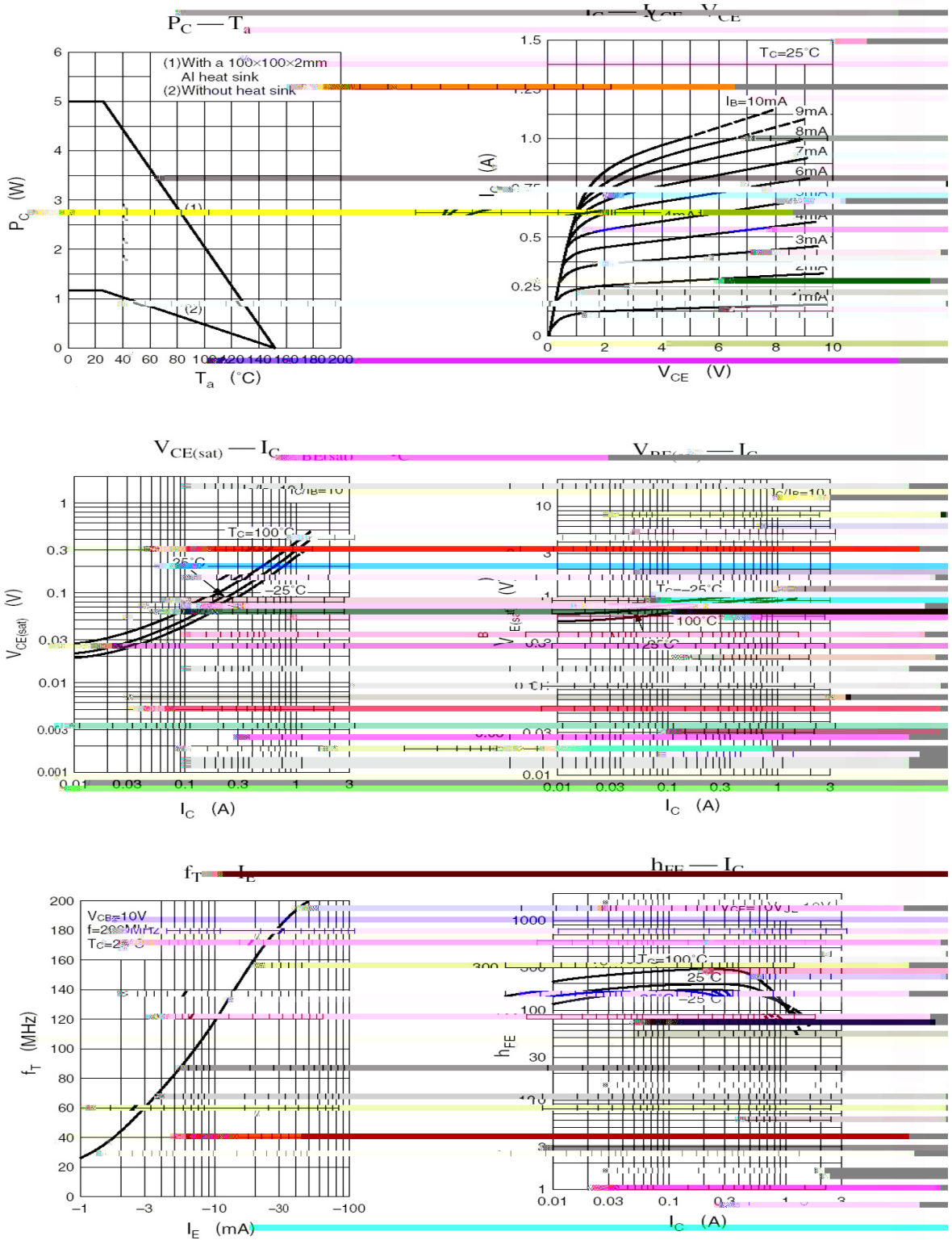
*Without heat sink

**With a 100×100×2mm AL heat sink

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=1.0mA$ $I_E=0$	45			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=2.0mA$ $I_B=0$	35			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20V$ $I_E=0$			0.1	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE}=20V$ $I_B=0$			100	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			10	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10V$ $I_C=500mA$	85	160	340	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=1.0A$	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			0.5	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=50mA$		200		MHz
Reverse Transfer Capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$			20	pF

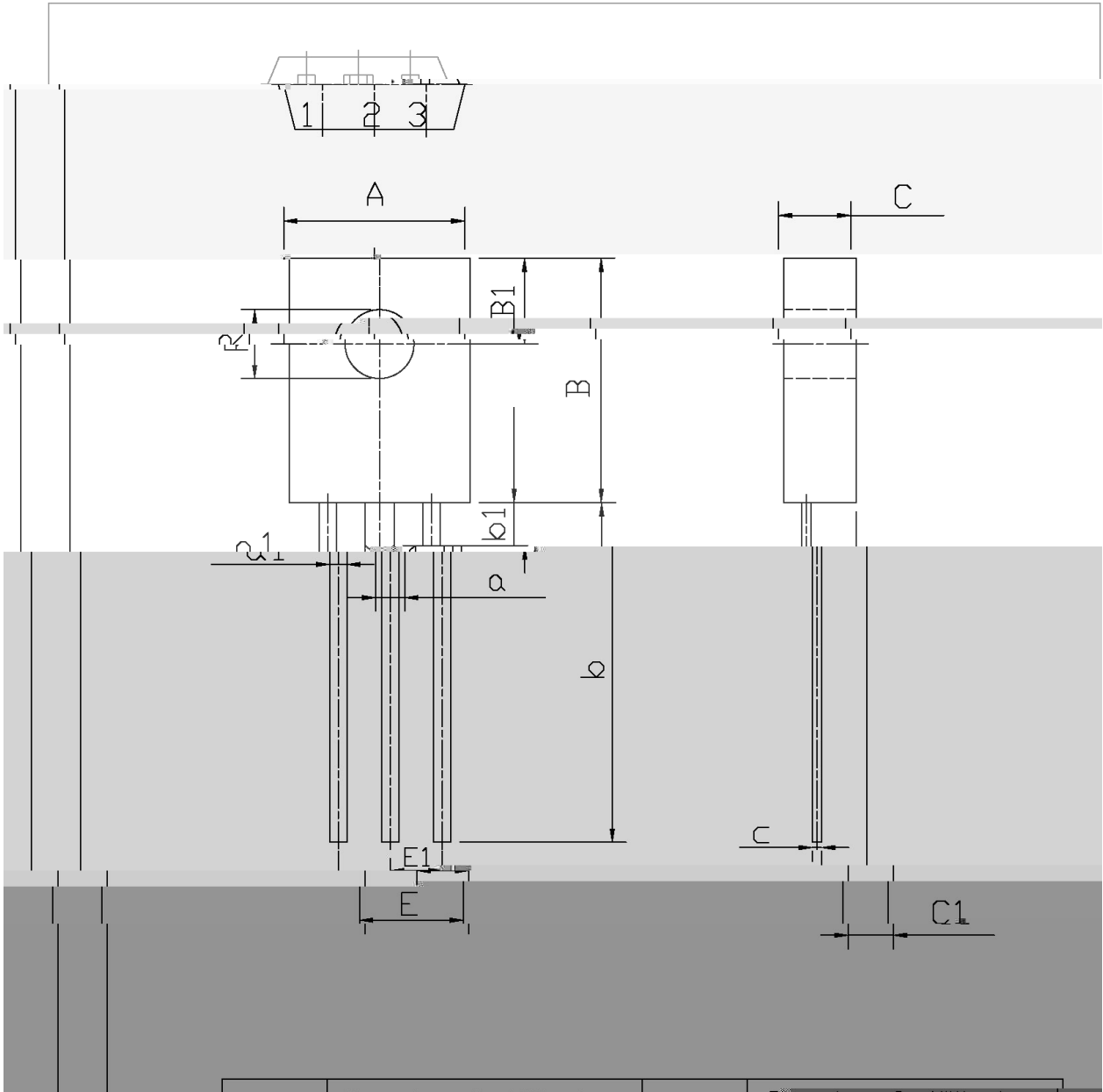
/ Electrical Characteristic Curve



/ Package Dimensions

TU-126F

单位: mm



Symbol	Min	Max	Symbol	Min	Max
A	7.8	8.2	a1	0.65	
B	10.0	11.0			

/ Marking Instructions



BR

C1846

Q: h_{FE}

Note:

BR: Company Code

C1846: Product Type.

Q: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

