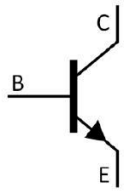
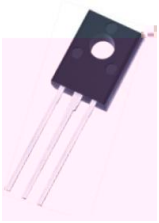
TO-126F NPN Silicon NPN transistor in a TO-126F Plastic Package.

$V_{CE(sat)}$, 2SA885 3W

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

Medium power amplifier.





PIN1 Emitter PIN 2 Collector PIN 3 Base

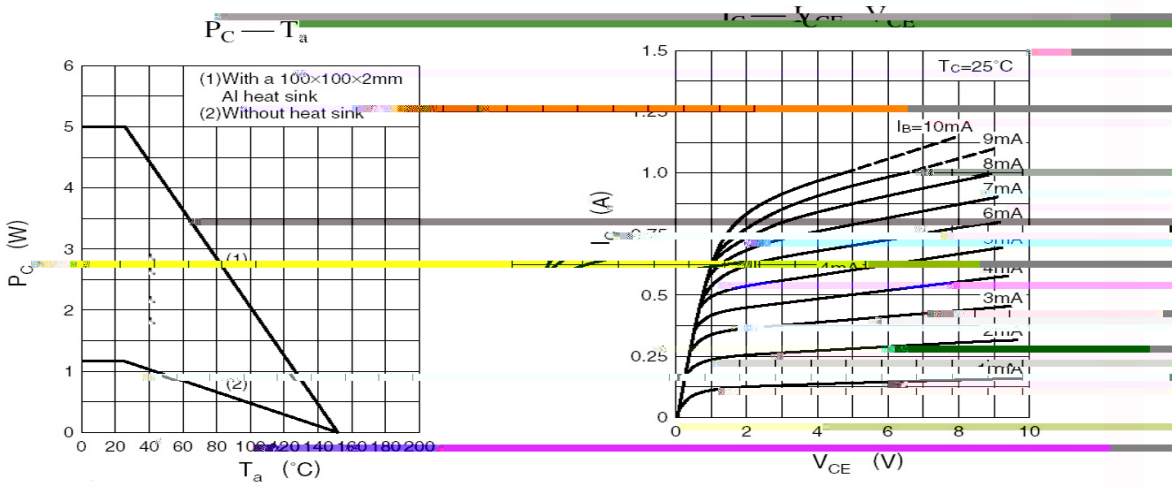
h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	85 170	120 240	170 340

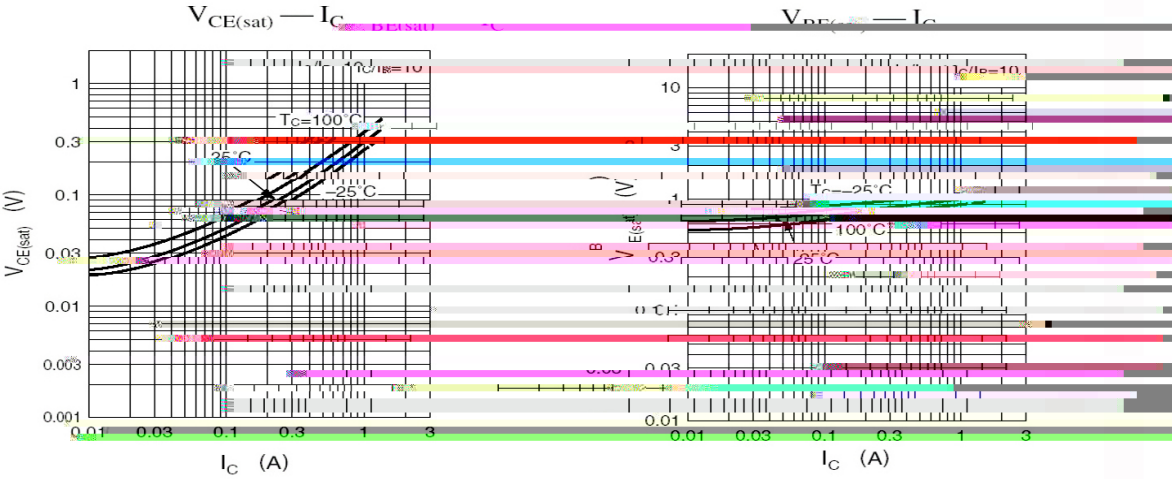
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	45	V
Collector to Emitter Voltage	V_{CEO}	35	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	1.0	A
Collector Current – Continuous(Pulse)	I_{CP}	1.5	A
Collector Power Dissipation	*P_C	1.2	W
Collector Power Dissipation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

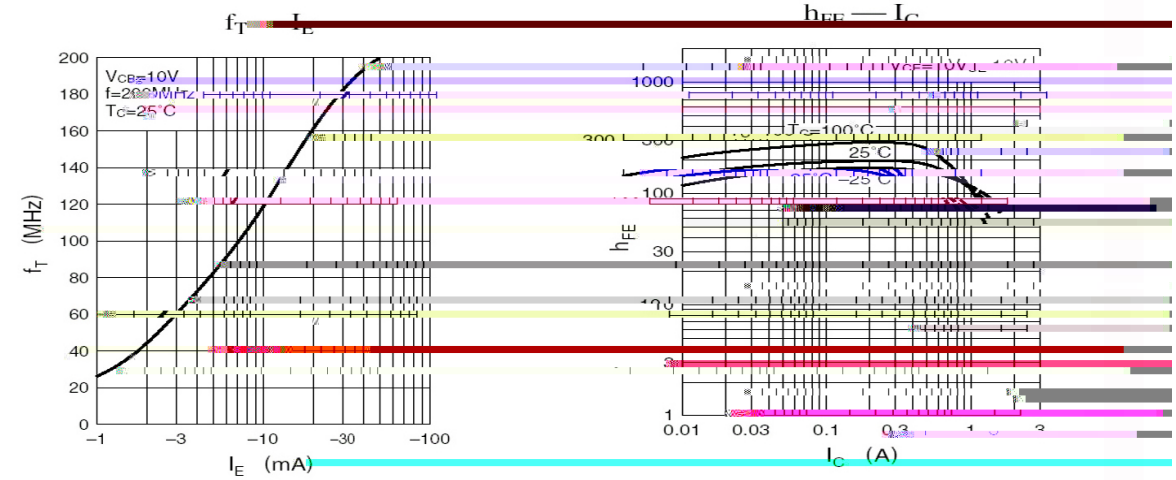
*Without heat sink

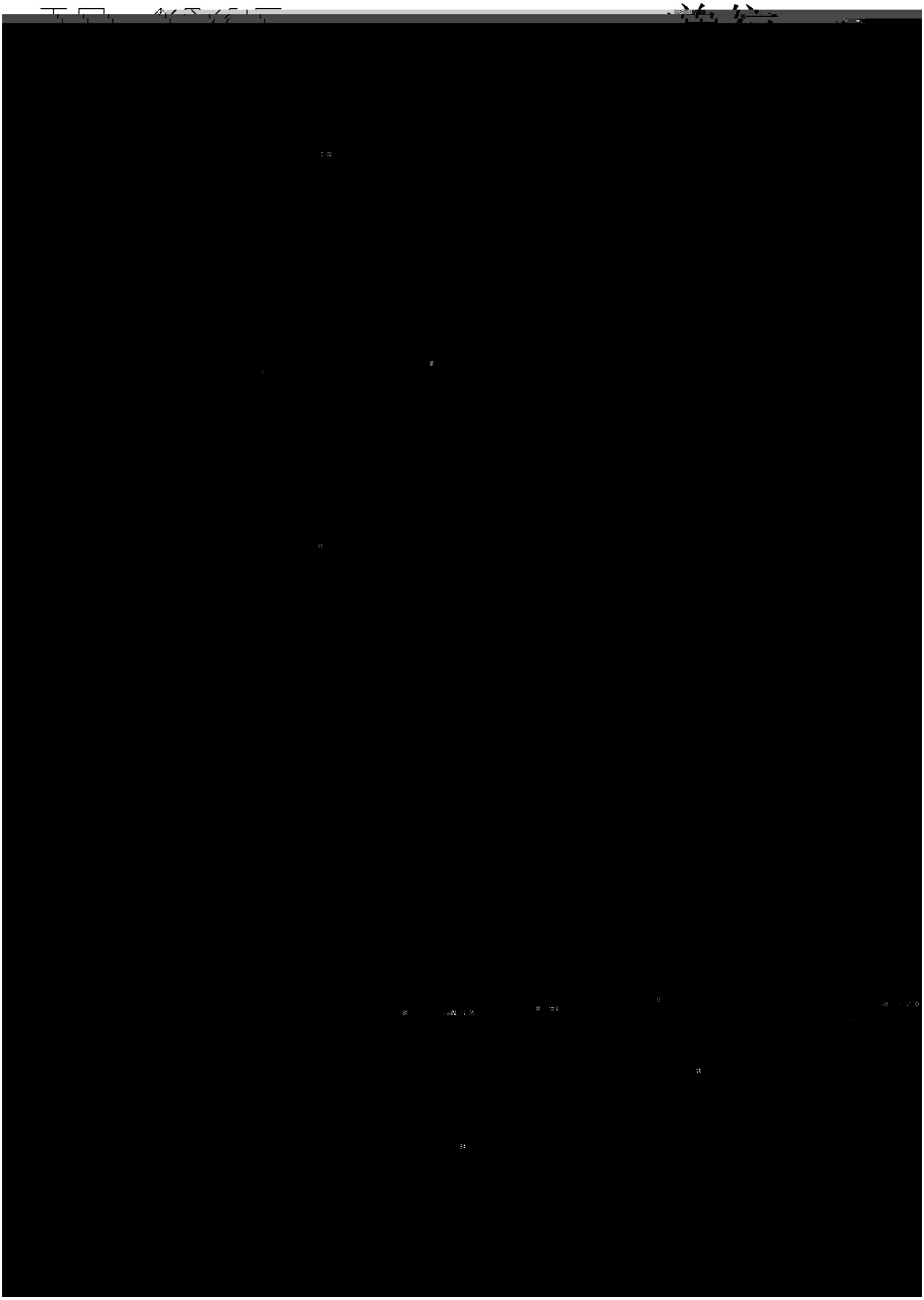
**With a 100×100×2mm AL heat sink

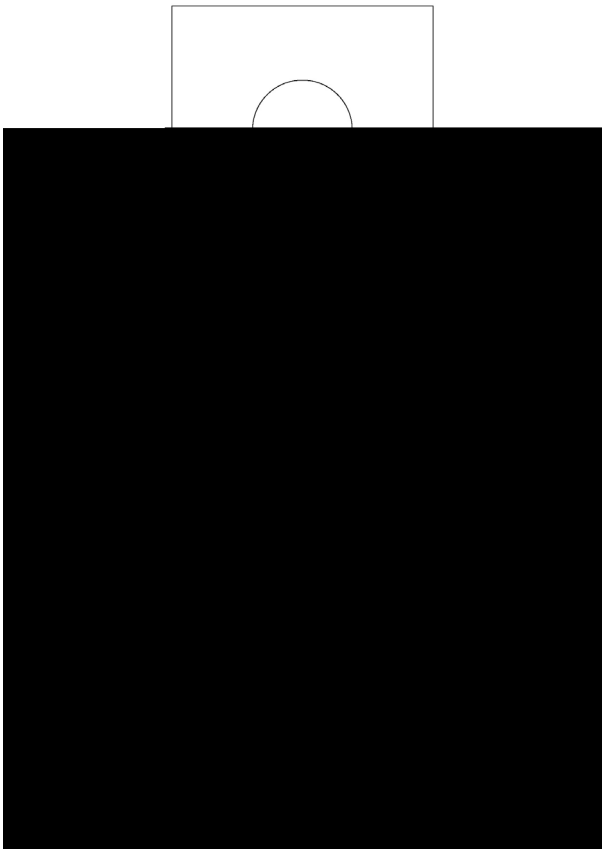
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=1.0mA I_E=0	45			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=2.0mA I_B=0	35			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=20V I_E=0			0.1	μA
Collector Cut-Off Current	I_{CEO}	V_{CE}=20V I_B=0			100	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 I_E=0 f=1.0MHz			20	pF


P_C — T_a
(1)With a 100×100×2mm Al heat sink
(2)Without heat sink
P_C (W)
T_a (°C)
I_C — V_{CE}
T_C=25°C
I_B=10mA
9mA
8mA
7mA
6mA
3mA
1mA
I_C (A)
V_{CE} (V)


$V_{CE(sat)}$ — I_C
T_C=100°C
25°C
−25°C
$V_{CE(sat)}$ (V)
I_C (A)
$V_{BE(sat)}$ — I_C
I_C/I_B=10
100°C
25°C
−25°C
$V_{BE(sat)}$ (V)
I_C (A)


f_T — I_E
V_{CB}=10V
f=200MHz
T_C=25°C
f_T (MHz)
I_E (mA)
h_{FE} — I_C
V_{CE}=10V
100°C
25°C
−25°C
h_{FE}
I_C (A)





BR

C1846

Q: h_{FE}

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Note:

BR:	Company Code
C1846:	Product Type.
Q:	h_{FE} Classifications Symbol
****:	Lot No. Code, code change with Lot No.

Rev.E Mar.-2016