

LAPT

# 2SC4886

Silicon NPN Epitaxial Planar Transistor (Complement to type 2SA1860)

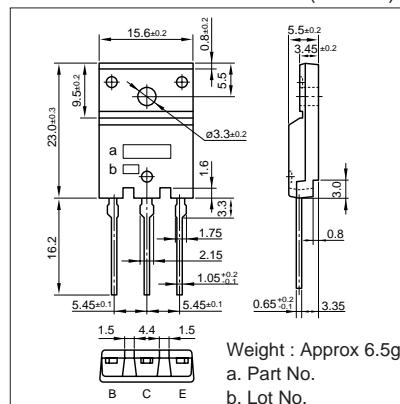
Application : Audio and General Purpose

**Absolute maximum ratings (Ta=25°C)**

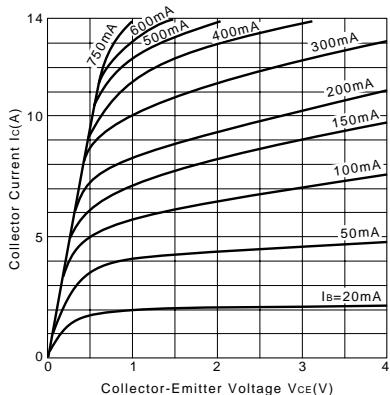
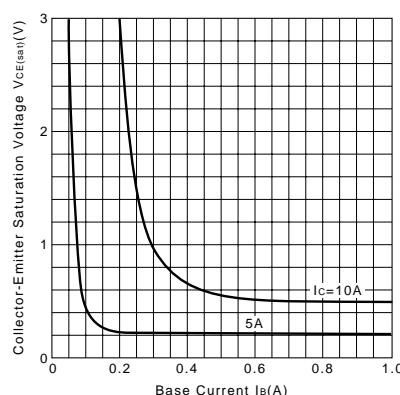
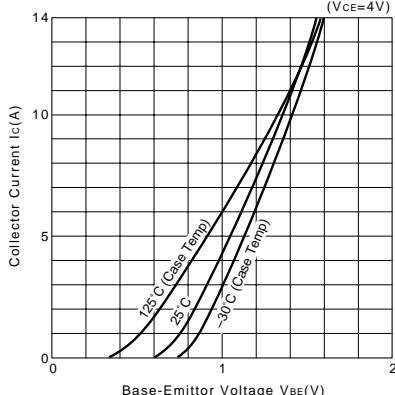
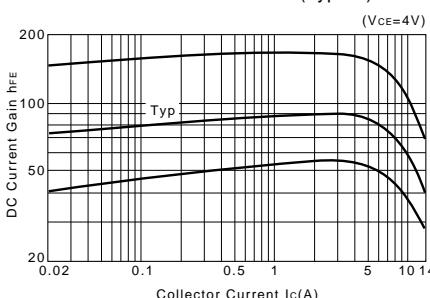
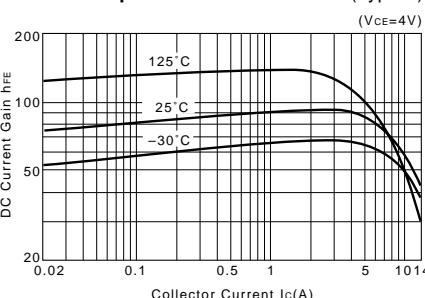
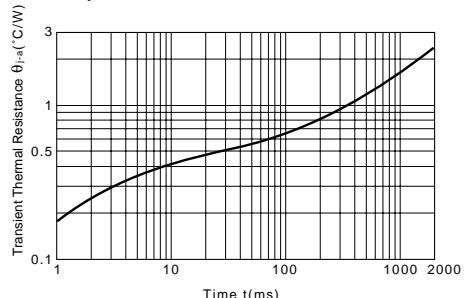
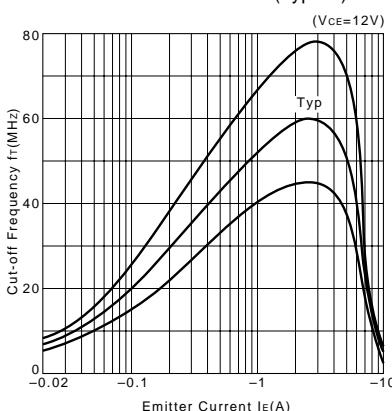
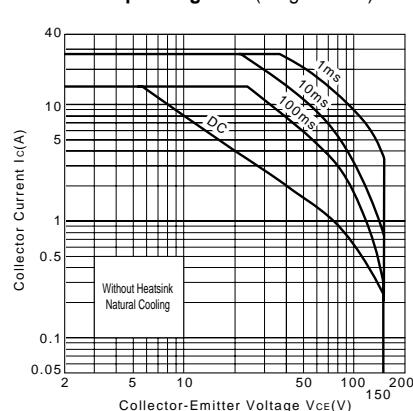
Symbol	Ratings	Unit
V <sub>CBO</sub>	150	V
V <sub>CEO</sub>	150	V
V <sub>EBO</sub>	5	V
I <sub>c</sub>	14	A
I <sub>b</sub>	3	A
P <sub>c</sub>	80(Tc=25°C)	W
T <sub>j</sub>	150	°C
t <sub>stg</sub>	-55 to +150	°C

**Electrical Characteristics (Ta=25°C)**

Symbol	Conditions	Ratings	Unit
I <sub>cBO</sub>	V <sub>CB</sub> =150V	100max	μA
I <sub>eBO</sub>	V <sub>EB</sub> =5V	100max	μA
V <sub>(BR)CEO</sub>	I <sub>c</sub> =25mA	150min	V
h <sub>FE</sub>	V <sub>CE</sub> =4V, I <sub>c</sub> =5A	50min*	
V <sub>CE(sat)</sub>	I <sub>c</sub> =5A, I <sub>b</sub> =500mA	2.0max	V
f <sub>t</sub>	V <sub>CE</sub> =12V, I <sub>b</sub> =-2A	60typ	MHz
C <sub>OB</sub>	V <sub>CB</sub> =10V, f=1MHz	200typ	pF

\*h<sub>FE</sub> Rank O(50 to 100), P(70 to 140), Y(90 to 180)**External Dimensions FM100(TO3PF)****Typical Switching Characteristics (Common Emitter)**

V <sub>CC</sub> (V)	R <sub>L</sub> (Ω)	I <sub>c</sub> (A)	V <sub>BB1</sub> (V)	V <sub>BB2</sub> (V)	I <sub>b1</sub> (A)	I <sub>b2</sub> (A)	t <sub>on</sub> (μs)	t <sub>stg</sub> (μs)	t <sub>f</sub> (μs)
60	12	5	10	-5	0.5	-0.5	0.26typ	1.5typ	0.35typ

**I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)****V<sub>CE(sat)</sub>-I<sub>b</sub> Characteristics (Typical)****I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)****h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)****h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)****θ<sub>j-a-t</sub> Characteristics****f<sub>t</sub>-I<sub>e</sub> Characteristics (Typical)****Safe Operating Area (Single Pulse)****Pc-Ta Derating**