

Silicon Epitaxial Base Mesa Transistor

T-33-21
T-33-13

**2SA1062 (PNP)
2SC2486 (NPN)**

TOP-3 Package (See Page 36 For Dimensions)

2SA1062 (PNP)

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Rating	Unit
Collector Base Voltage	-VcBo	120	V
Collector-Emitter Voltage	-VCEo	120	V
Emitter-Base Voltage	-VEBo	5	V
Collector Current	-Ic	7	A
Peak Collector Current	-IcM	12	A
Collector Power Dissipation	Pc*	80	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

*Tc=25°C

High Power Audio Frequency Amplifier
Complementary Pair with 2SC2486

Feature:

- High collector power dissipation: 80W(Tc=25°C)

**hFE Classification

hFE	100~120	60~120	40~80
Class	P	Q	R

Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	-IcBo	-VcB=120V, Ie=0			50	μA
Emitter Cutoff Current	-IeBo	-VEB=3V, Ic=0			50	μA
DC Current Gain	hFE1	-VCE=5V, -Ic=0.02A	20			
	hFE2**	-VCE=5V, -Ic=1.0A	40		220	V
	hFE3	-VCE=5V, -Ic=5A	20			
Base Emitter Voltage	-VBE	-VCE=5V, -Ic=5A			1.8	V
Collector-Emitter Saturation Voltage	-VCE(sat)	-Ic=5A, Ib=0.5A			2.0	V
Gain Bandwidth Product	ft	-VCE=5V, -Ic=0.5A		20		MHz

2SC2486 (NPN)

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Rating	Unit
Collector-Base Voltage	VcBo	120	V
Collector-Emitter Voltage	VCEo	120	V
Emitter-Base Voltage	VEBo	5	V
Collector Current	Ic	7	A
Peak Collector Current	IcM	12	A
Collector Power Dissipation	Pc*	80	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

*Tc=25°C

High Power Audio Frequency Amplifier
Complementary Pair with 2SA1062

Feature:

- High collector power dissipation: 80W(Tc=25°C)

**hFE Classification

hFE	100~200	60~120	40~80
Class	P	Q	R

Electrical Characteristics (Ta=25°C)

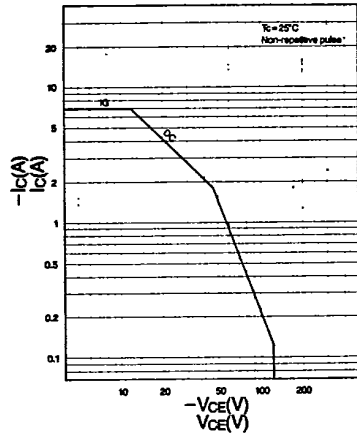
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	IcBo	VcB=120V, Ie=0			50	μA
Emitter Cutoff Current	IeBo	VEB=3V, Ic=0			50	μA
DC Current Gain	hFE1	VCE=5V, Ic=0.02A	20			
	hFE2**	VCE=5V, Ic=1.0A	40		220	V
	hFE3	VCE=5V, Ic=5A	20			
Base Emitter Voltage	VBE	VCE=5V, Ic=5A			1.8	V
Collector-Emitter Saturation Voltage	VCE(sat)	Ic=5A, Ib=0.5A			2.0	V
Gain Bandwidth Product	ft	VCE=5V, Ic=0.5A		20		MHz

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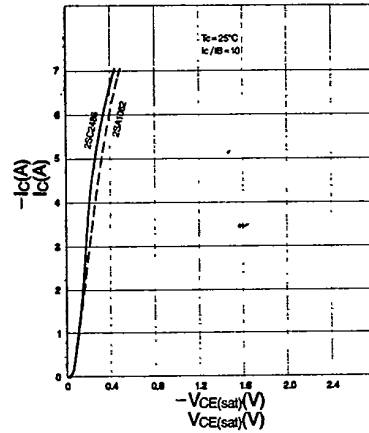
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Typical Characteristics

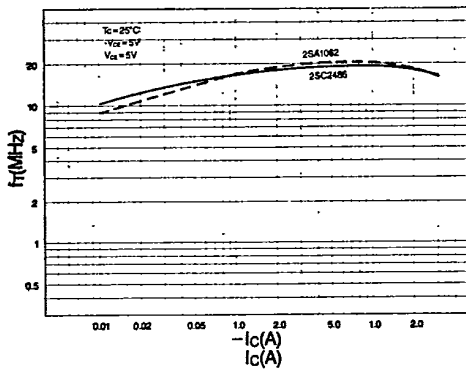
Area of Safe Operation (ASO) ($T_c = 25^\circ\text{C}$)



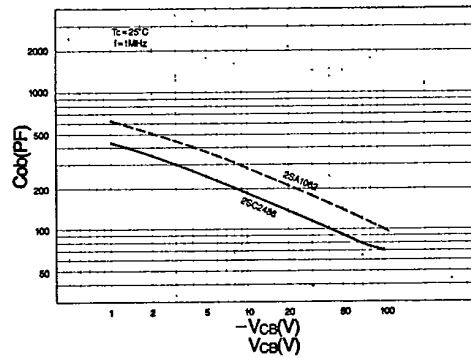
$V_{CE(sat)}$ vs. I_c characteristics



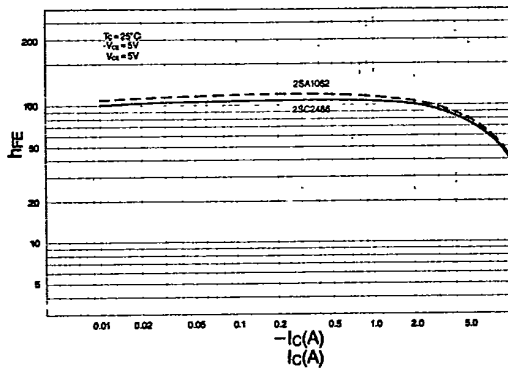
f_T vs. I_c characteristics



C_{ob} vs. V_{CB} characteristics



h_{FE} vs I_c characteristics



V_{BE} vs. I_c characteristics

