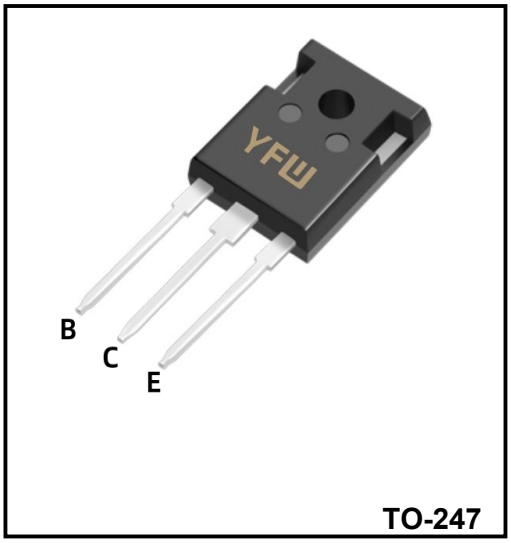
NPN Audio and General purpose Amplifier



Features

- High collector-base breakdown voltage
- High DC current gain
- Complement to type 2SA1694

Absolute Maximum Rating (T_C=25℃)

Parameter		Symbol	Value	Unit
Collector-Base Voltage		BV_{CBO}	160	V
Collector-Emitter Voltage		BV_{CEO}	120	V
Emitter-Base Voltage		BV_{EBO}	6	V
Collector Current		I_C	8	A
Base Current		I_B	3	A
Power Dissipation	T_A=25℃	P_D	3.5	W
	T_C=25℃		80	
Junction Temperature		T_j	150	℃
Storage Temperature		T_{stg}	-40～150	℃

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

Electrical Characteristics (Ta=25℃)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	I_C = 1mA，I_E = 0	160			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C = 50mA，I_B = 0	120			V
Emitter-base breakdown voltage	BV_{EBO}	I_E = 1mA，I_C = 0	6			V
Collector cut-off current	I_{CBO}	V_{CB} = 120V，I_E = 0			10	μA
Emitter cut-off current	I_{EBO}	V_{EB} = 6V，I_C = 0			10	μA
DC current gain	h_{FE}	V_{CE}= 4V，I_C= 3A	50		180	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 3A，I_B = 0.3A			1.5	V
Base-emitter on voltage	$V_{BE(sat)}$	I_C = 3A，I_B = 0.3A			2.5	V
Transition frequency	f_T	V_{CE}=12V, I_C= 0.5A, f=1MHz		20		MHz
Output Capacitance	C_{ob}	V_{CB}=10V,I_E = 0,f=1MHz		200		pF
Turn-on Time	t_{ON}	V_C = 40V, I_C= 4A, I_{B1}= I_{B2} = 0.4A R_L=10Ω		0.13		μS
Switching Time	t_S			3.5		μS
Fall Time	t_F			0.32		μS

*Pulse Test: Pulse Wieth = 300μs, Duty Cycle = 2%

h_{FE} Classification

Clas	2SC4467-O	2SC4467-P	2SC4467-Y
Range	50~100	70~140	90~180

Typical Characteristics

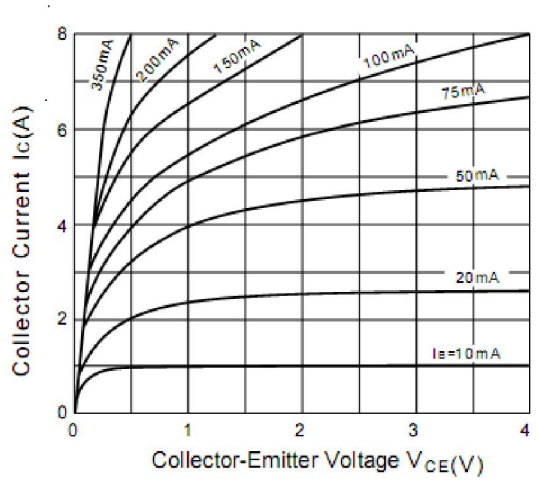


Figure 1. Static Characteristic

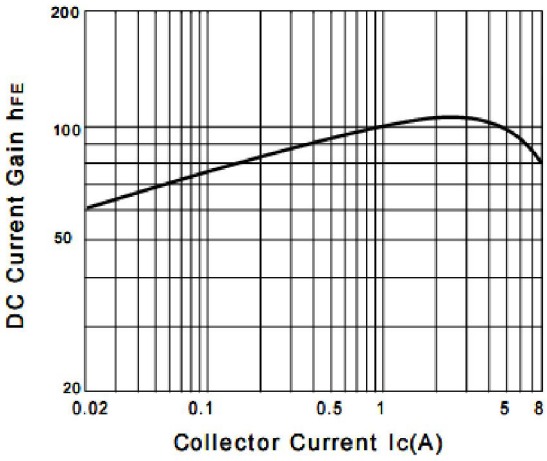


Figure 2. DC current Gain

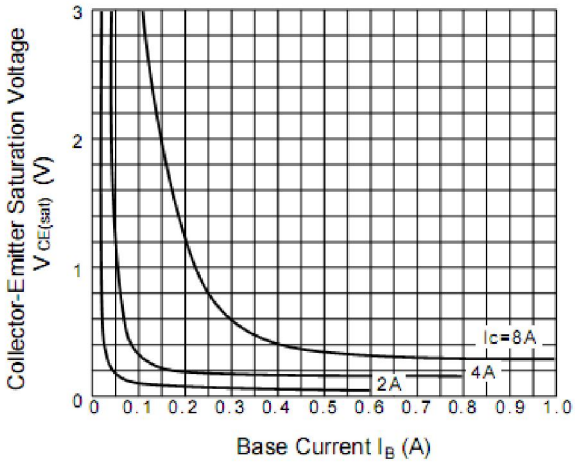


Figure 3. Saturation Voltage

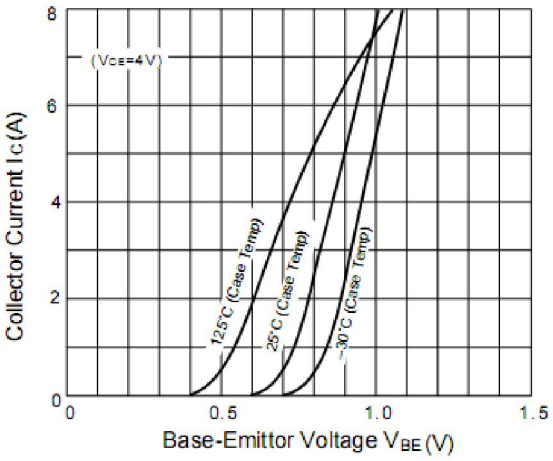


Figure 4. I_C-V_{BE} Temperature Characteristics

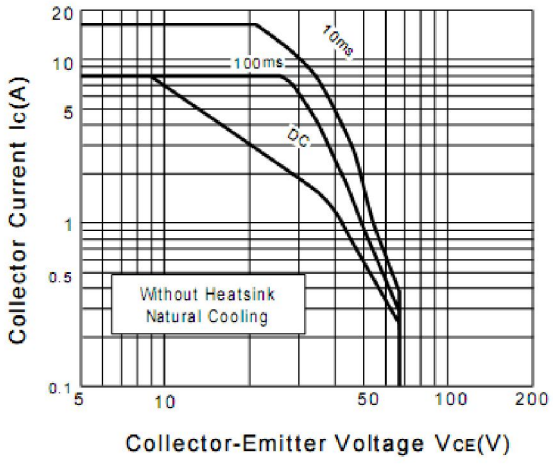


Figure 5. Safe Operating Area

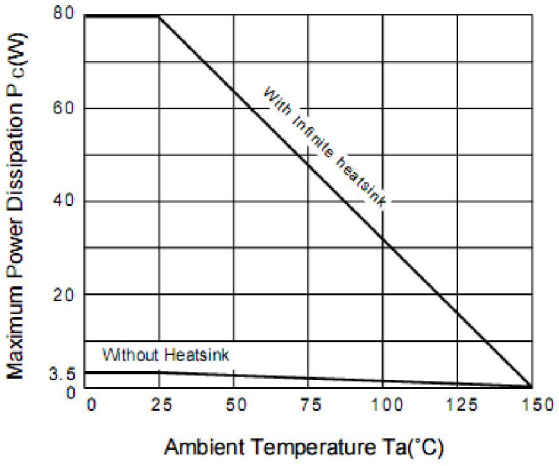
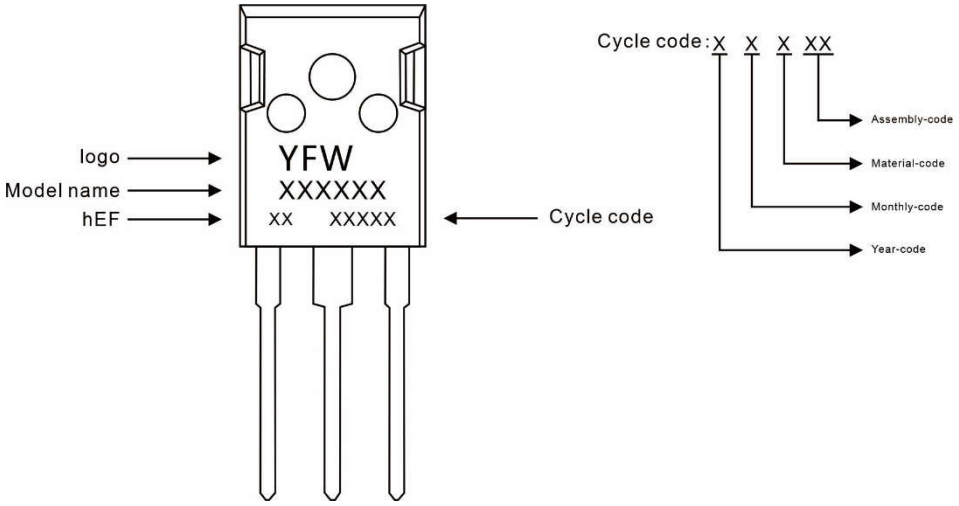


Figure 6. Power Derating

Marking Diagram

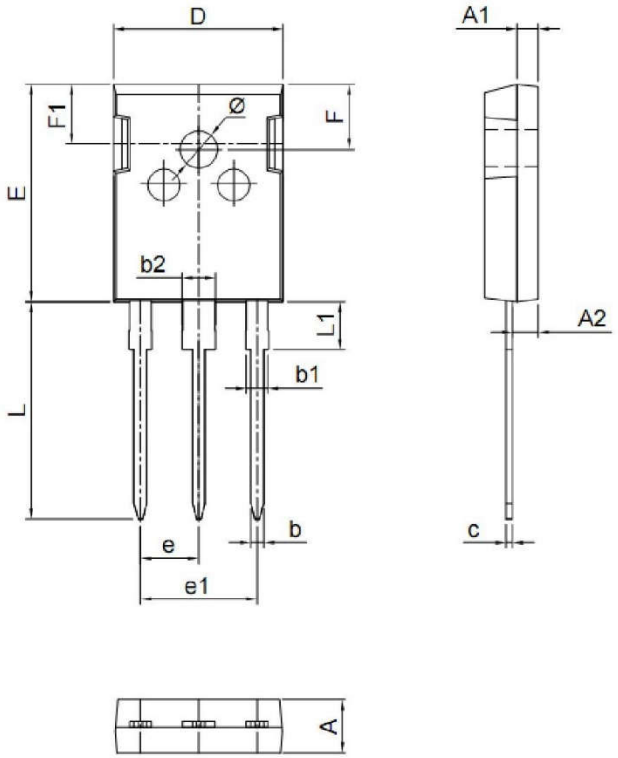


Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
2SC4467	TO-247	0.209oz(5.93g)	30pcs/tube	600PCS/Box 2400PCS/Carton

Package Dimensions

TO-247



Symbol	Dimensions in mm		Dimensions in Inch	
	Min.	Max.	Min.	Max.
A	4.90	5.10	0.193	0.201
A1	1.90	2.10	0.075	0.083
A2	2.29	2.54	0.090	0.100
b	1.00	1.40	0.039	0.055
b1	2.00	2.20	0.079	0.087
b2	3.00	3.20	0.118	0.126
c	0.50	0.70	0.020	0.028
D	15.75	16.05	0.620	0.632
E	20.20	20.80	0.795	0.819
e	5.45 (BSC)		0.215 (BSC)	
e1	10.90 (BSC)		0.429 (BSC)	
F	6.05	6.25	0.238	0.246
F1	5.80	6.00	0.228	0.236
L	20.10	20.40	0.791	0.803
L1	4.05	4.35	0.159	0.171
Φ	3.50	3.70	0.138	0.146

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