



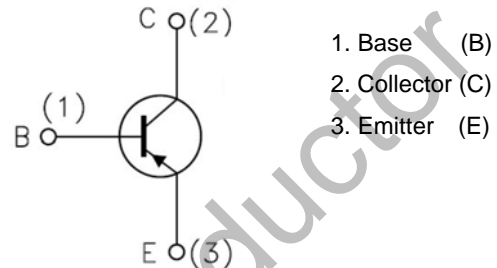
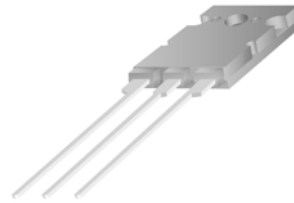
WGA1943

Audio Power Amplifier

Features:

- High Current Capability: $I_C = -10A$
- High Power Dissipation
- Extended Safe Operating Area.
- PNP Transistor
- Complement to WGC5200
- 100% Avalanche Tested

TO-3PL

Absolute Maximum Ratings* ($T_C = 25^\circ\text{C}$ Unless otherwise noted)

Symbol	PARAMETER	Value	Unit
BV_{CBO}	Collector-Base Voltage	-230	V
BV_{CEO}	Collector-Emitter Voltage	-230	
$BVEBO$	Emitter-Base Voltage	-5	
I_C	Collector Current	-15	A
I_B	Base Current	-1.0	
P_C	Total Device Dissipation ($T_C = 25^\circ\text{C}$)	100	W
	Derate above 25°C	1.04	W/ $^\circ\text{C}$
$R_{\theta JC}$	Thermal Resistance, Junction to Case (Max.)	0.83	$^\circ\text{C}/\text{W}$
T_j, T_{stg}	Junction and Storage Temperature	-40~+150	$^\circ\text{C}$

Electrical Characteristics* ($T_C = 25^\circ\text{C}$ unless otherwise noted)

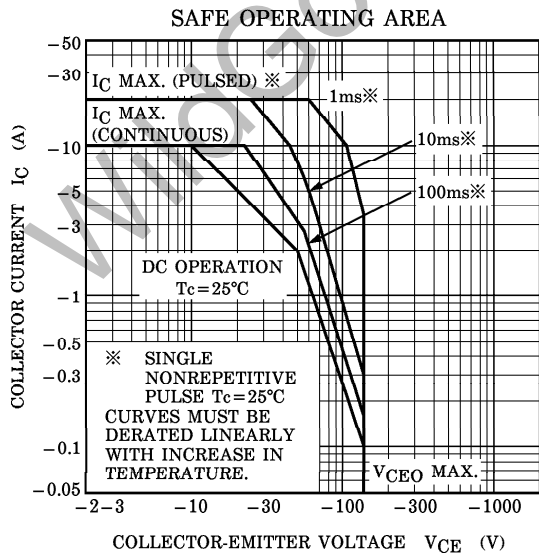
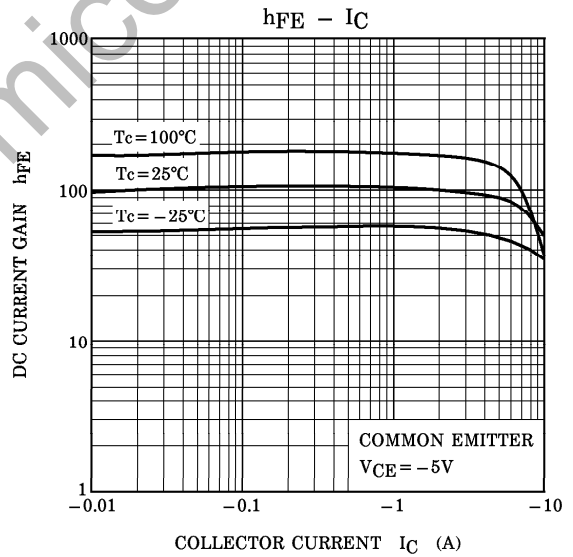
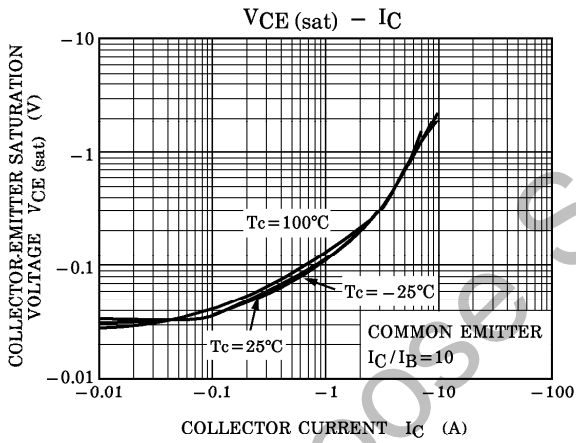
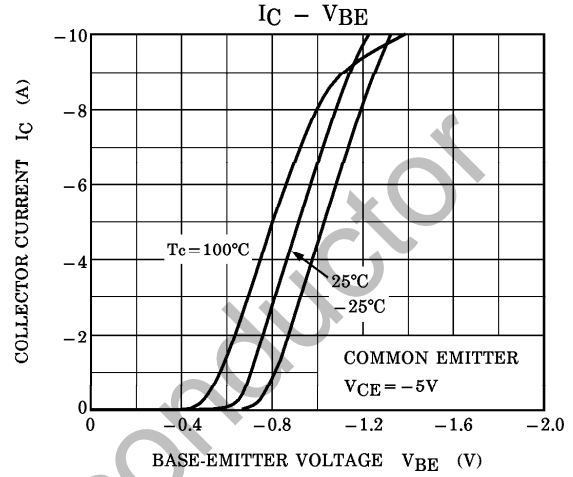
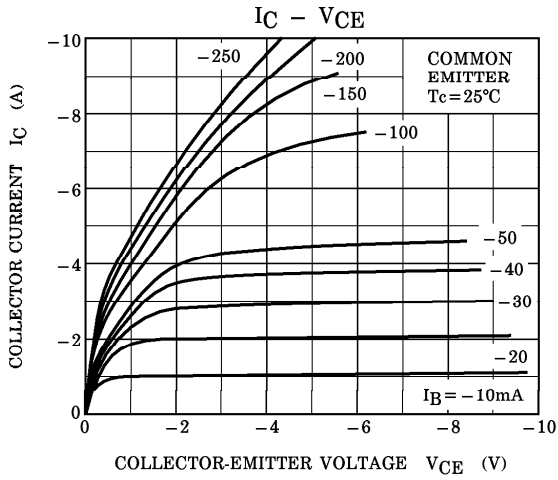
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = -5\text{mA}, I_E = 0$	-230	-	-	V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}, R_{BE} = \infty$	-230	-	-	V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -5\text{mA}, I_C = 0$	-5	-	-	V
I_{CBO}	Collector Cut-off Current	$V_{CB} = -140\text{V}, I_E = 0$	-	-	-5	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -5\text{V}, I_C = 0$	-	-	-5	μA
$h_{FE(1)}$	DC Current Gain	$V_{CE} = -5\text{V}, I_C = -1\text{A}$	55	-	160	-
$h_{FE(2)}$	DC Current Gain	$V_{CE} = -5\text{V}, I_C = -5\text{A}$	35	80	-	-
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -7\text{A}, I_B = -0.7\text{A}$	-	-0.	-2	V
$V_{EB(sat)}$	Base-Emitter On Voltage	$V_{CE} = -5\text{V}, I_C = -5\text{A}$	-	-1.0	-1.5	V
fT	Current Gain Bandwidth Product	$V_{CE} = -5\text{V}, I_C = -1\text{A}$	-	30	-	MHz
C_{OB}	Output Capacitance	$V_{CE} = -10\text{V}, f = 1\text{MHz}$	-	170	-	pF

Classification Of h_{FE}

Classification	R	O
$h_{FE(1)}$	55-110	80-160

* Pulse Test: Pulse Width=20 μs , Duty Cycle $\leq 2\%$

Typical Characteristics



Package Dimension

