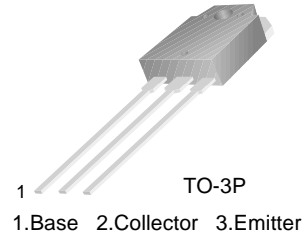




KSA1695

Audio Power Amplifier

- High Current Capability : $I_C = -15A$
- High Power Dissipation
- Wide S.O.A
- Complement to KSC4468



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-140	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current (DC)	-8	A
I_{CP}	Collector Current (Pulse)	-16	A
P_C	Collector Dissipation ($T_C=25^\circ C$)	80	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ C$

Electrical Characteristics $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=-5mA, I_E=0$	-160			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=-10mA, R_{BE}=\infty$	-140			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=-5mA, I_C=0$	-6			V
I_{CBO}	Collector Cut-off Current	$V_{CB}=-80V, I_E=0$			-0.1	mA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=-4V, I_C=0$			-0.1	mA
h_{FE1}	* DC Current Gain	$V_{CE}=-5V, I_C=-1A$	60		200	
h_{FE2}	DC Current Gain	$V_{CE}=-5V, I_C=-6A$	20			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-5A, I_B=-0.5A$			-2.5	V
$V_{BE(on)}$	Base-Emitter ON Voltage	$V_{CE}=-5V, I_C=-1A$			-1.5	V
f_T	Current Gain Bandwidth Product	$V_{CE}=-5V, I_C=-1A$		30		MHz
C_{ob}	Output Capacitance	$V_{CB}=-10V, f=1MHz$		300		pF
t_{ON}	Turn ON Time	$V_{CC}=-20V,$ $I_C = 1A = 10I_{B1} = -10I_{B2}$		0.25		μs
t_F	Fall Time	$R_L = 20\Omega$		0.53		μs
t_{STG}	Storage Time			1.61		μs

* Pulse Test : PW=20us

* h_{FE} Classification

Classification	O	Y
h_{FE1}	60 ~ 120	100 ~ 200

Typical Characteristics

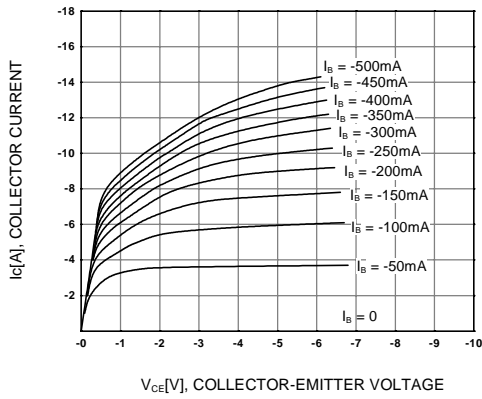


Figure 1. Static Characteristic

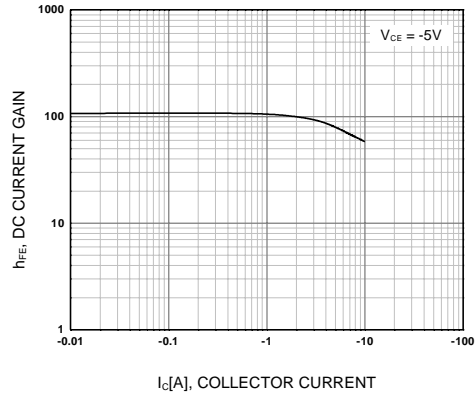


Figure 2. DC current Gain

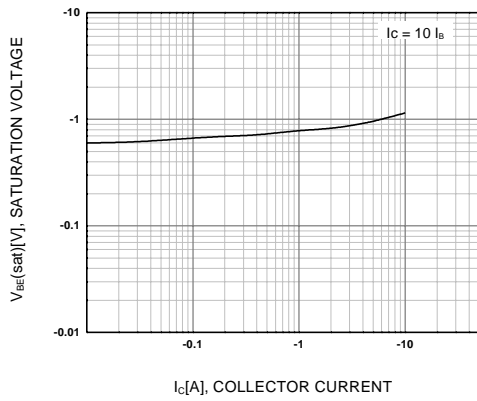


Figure 3. Base-Emitter Saturation Voltage

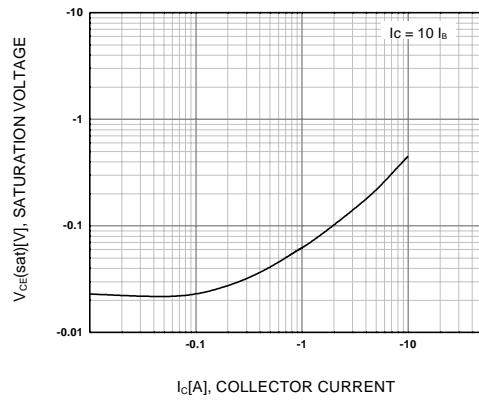


Figure 4. Collector-Emitter Saturation Voltage

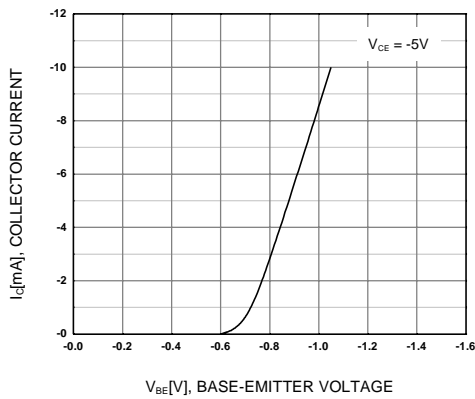


Figure 5. Base-Emitter On Voltage

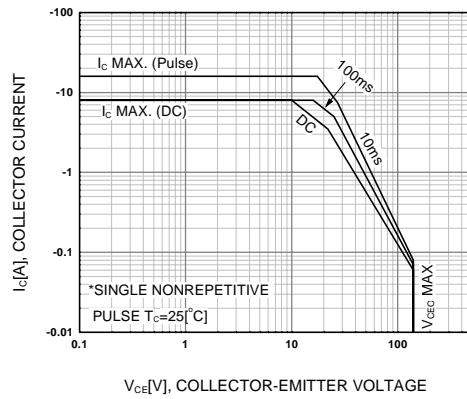


Figure 6. Safe Operating Area

Typical Characteristics (Continued)

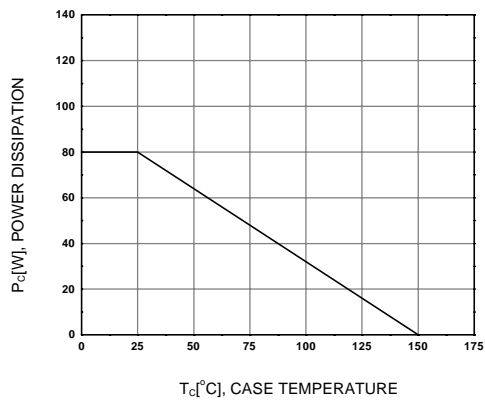
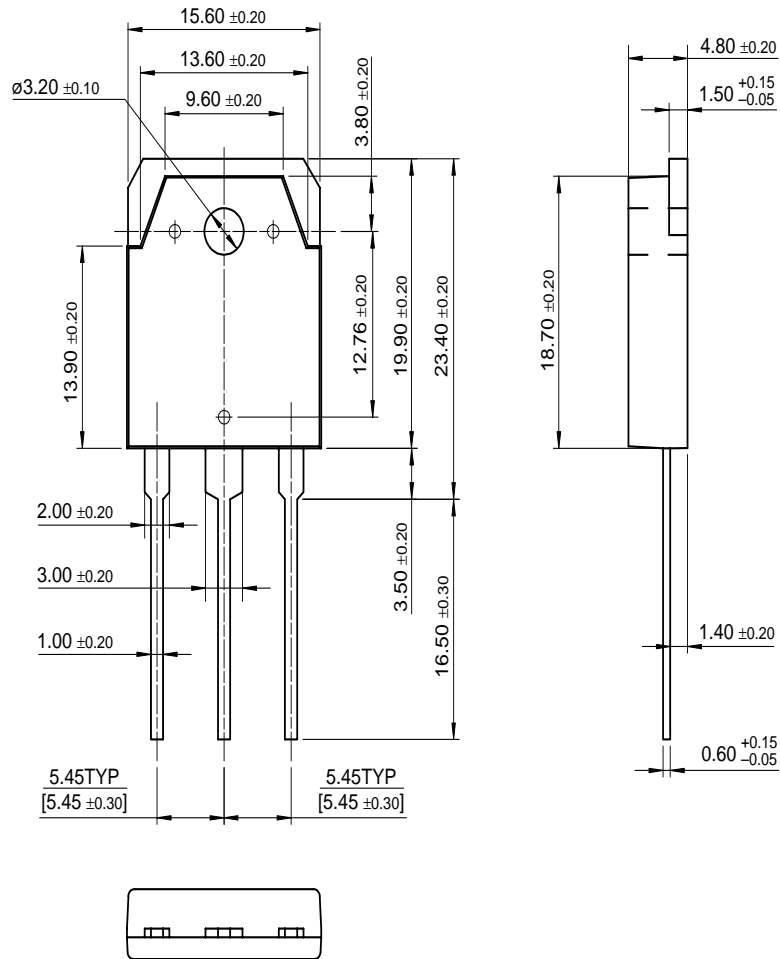


Figure 7. Power Derating

Package Dimensions

TO-3P



Dimensions in Millimeters

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FAST®	Quiet Series™	
FASTr™	SuperSOT™-3	
GTO™	SuperSOT™-6	

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