

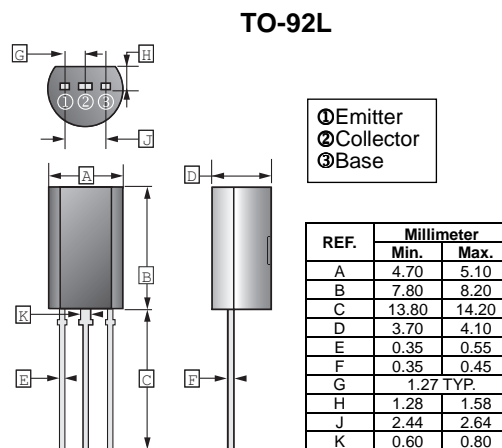
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURE

- Audio power amplifier

CLASSIFICATION OF h_{FE}

Product-Rank	KSA928ATL-O	KSA928ATL-Y
Range	100~200	160~320



ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-2	A
Collector Power Dissipation	P_C	1	W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-30	-	-	V	$I_C = -100\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30	-	-	V	$I_C = -10\text{mA}, I_B = 0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -1\text{mA}, I_C = 0$
Collector Cut-off Current	I_{CBO}	-	-	-0.1	μA	$V_{CB} = -30\text{V}, I_E = 0$
Emitter cut-off current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain	h_{FE}	100	-	320		$V_{CE} = -2\text{V}, I_C = -500\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-2	V	$I_C = -1.5\text{A}, I_B = -30\text{mA}$
Base-Emitter Voltage	V_{BE}	-	-	-1	V	$I_C = -500\text{mA}, V_{CE} = -2\text{V}$
Transition Frequency	f_T	-	120	-	MHZ	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$
Collector Output Capacitance	C_{Ob}	-	48	-	pF	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$

CHARACTERISTIC CURVES

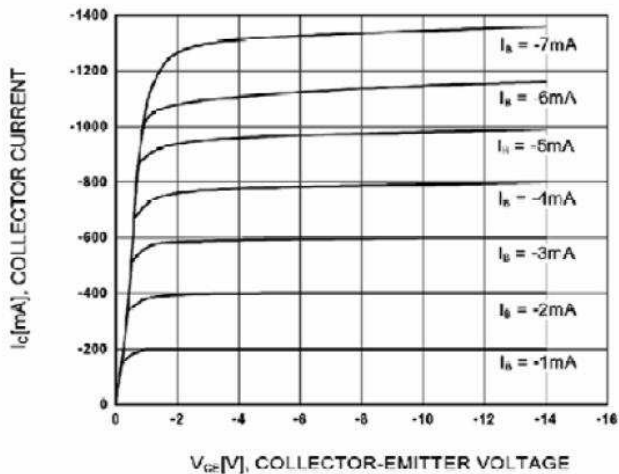


Figure 1. Static Characteristic

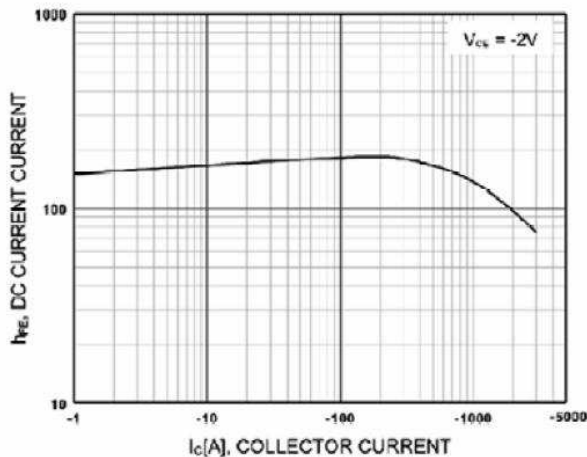


Figure 2. DC current Gain

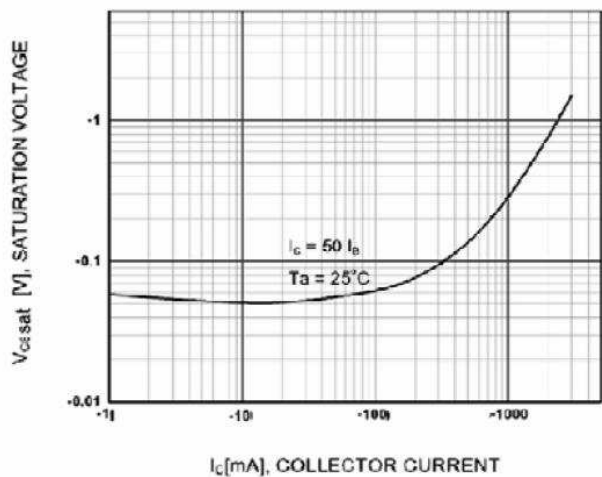


Figure 3. Collector-Emitter Saturation Voltage

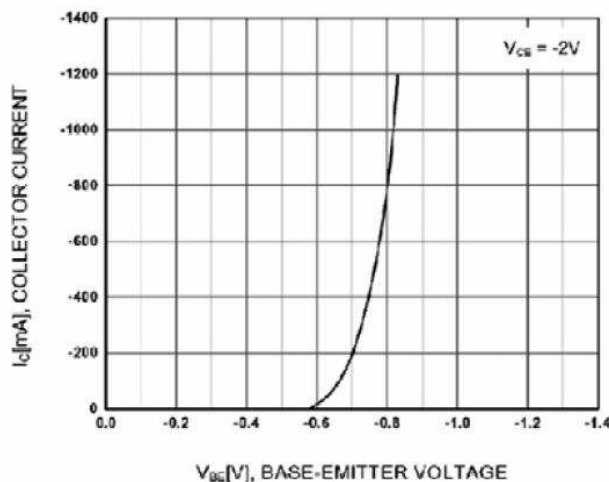


Figure 4. Base-Emitter On Voltage

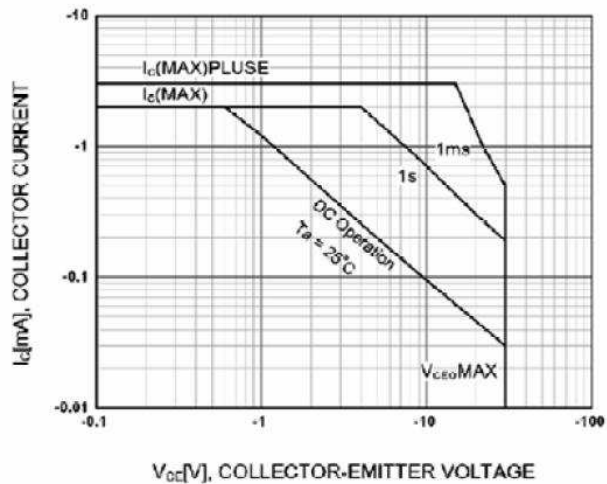


Figure 5. Safe Operating Area

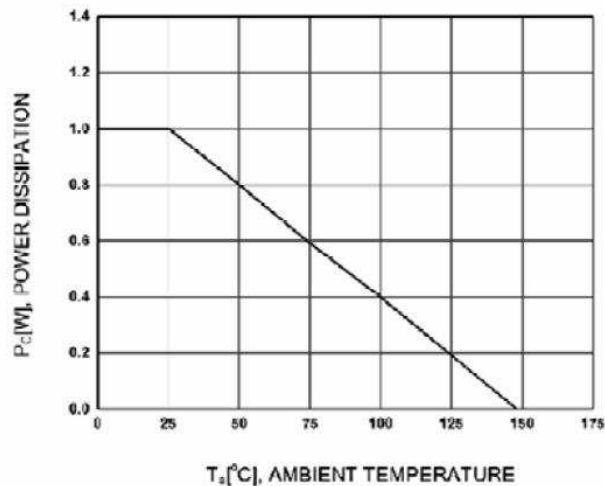


Figure 6. Power Derating