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KSA928A

Audio Power Amplifier

- Complement to KSC2328A
- Collector Power Dissipation : P_C=1W
- 3 Watt Output Application



TO-92L

1. Emitter 2. Collector 3. Base

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-2	A
P_C	Collector Power Dissipation	1	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= -100μA, I_E=0	-30			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= -10mA, I_B=0	-30			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -1mA, I_C=0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB}= -30V, I_E=0			-100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB}= -5V, I_C=0			-100	nA
h_{FE}	DC Current Gain	V_{CE}= -2V, I_C= -500mA	100		320	
V_{BE} (on)	Base-Emitter On Voltage	V_{CE}= -2V, I_C= -500mA			-1.0	V
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C= -1.5A, I_B= -30mA			-2.0	V
C_{ob}	Output Capacitance	V_{CB}= -10V, I_E=0, f=1MHz		48		pF
f_T	Current Gain Bandwidth Product	V_{CE}= -2V, I_C= -500mA		120		MHz

h_{FE} Classification

Classification	O	Y
h_{FE}	100 ~ 200	160 ~ 320

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Typical Characteristics

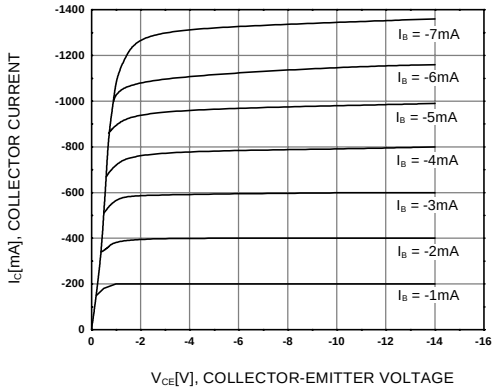


Figure 1. Static Characteristic

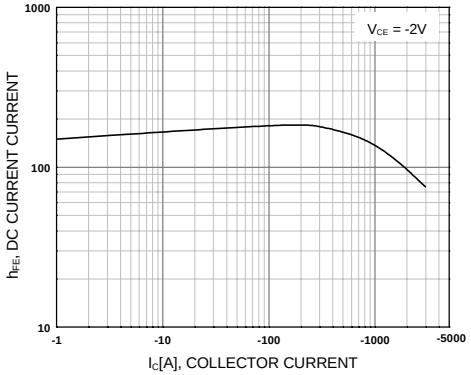


Figure 2. DC current Gain

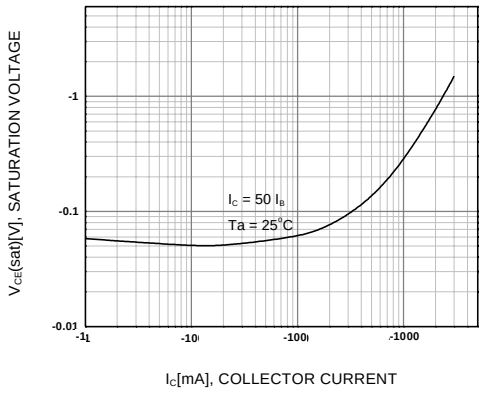


Figure 3. Collector-Emitter Saturation Voltage

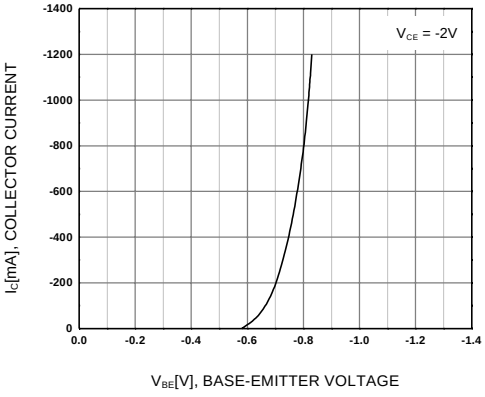


Figure 4. Base-Emitter On Voltage

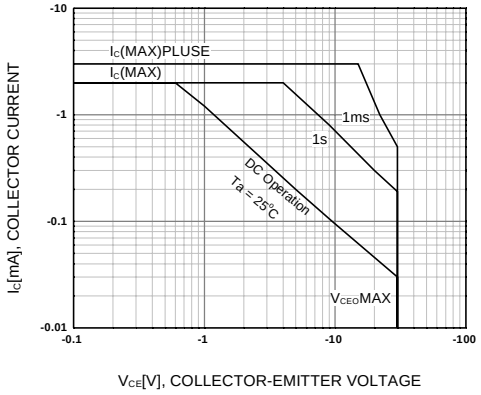


Figure 5. Safe Operating Area

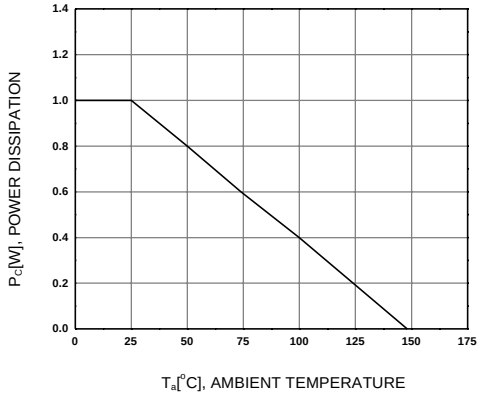


Figure 6. Power Derating

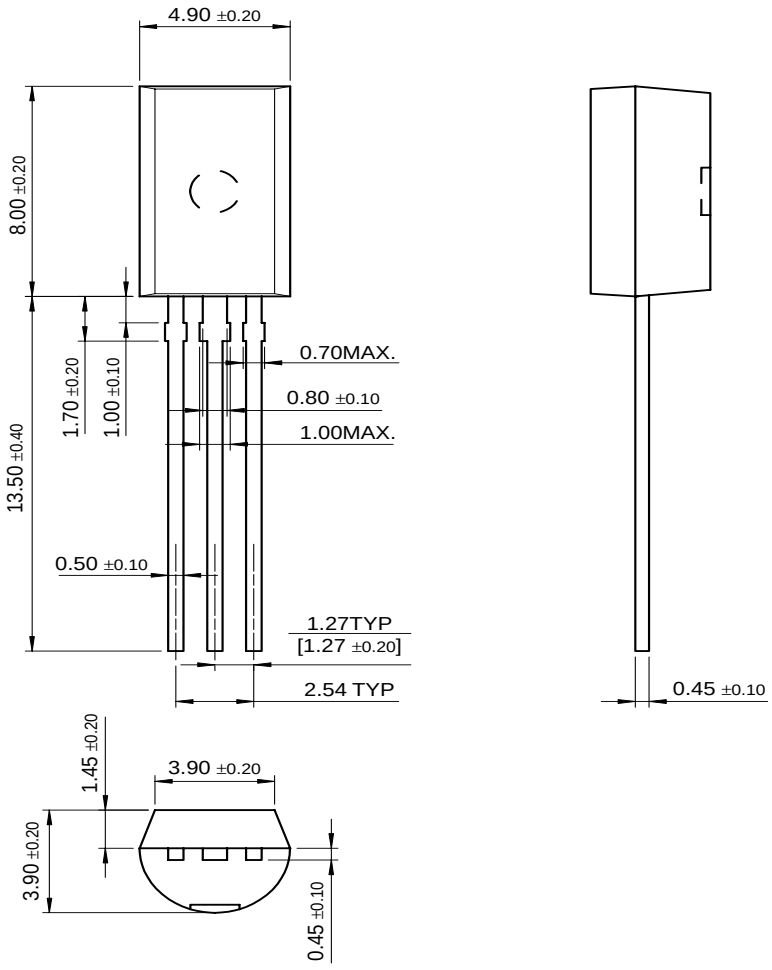
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Package Dimensions

TO-92L



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E^2CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I^2C™	OCX™	RapidConfigure™	UHC™
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The Power Franchise™		OPTOLOGIC®	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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