Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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FAIRCHILD
SEMICONDUCTOR®

KSC2310

High Voltage Power Amplifier

- Collector-Base Voltage : V_{CBO}=200V
- Current Gain Bandwidth Product : f_T=100MHz

TO-92L

1. Emitter 2. Collector 3. Base

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
P_C	Collector Power Dissipation	800	mW
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	200			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C=5mA, I_B=0	150			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E=100μA, I_C=0	5			V
I_{CBO}	Collector Cut-off Current	V_{CB}=200V, I_E=0			0.1	μA
h_{FE}	DC Current Gain	V_{CE}=5V, I_C=10mA	40		240	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C=10mA, I_B=1mA			0.5	V
f_T	Current Gain Bandwidth Product	V_{CE}=30V, I_C=10mA		100		MHz
C_{ob}	Output Capacitance	V_{CB}=10V, I_E=0, f=1MHz		3.5	5	pF

h_{FE} Classification

Classification	R	O	Y
h_{FE}	40 ~ 80	70 ~ 140	120 ~ 240

Typical Characteristics

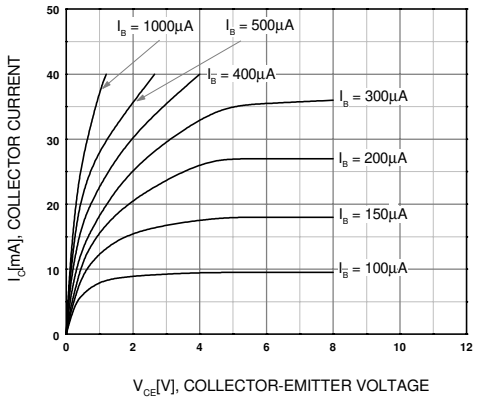


Figure 1. Static Characteristic

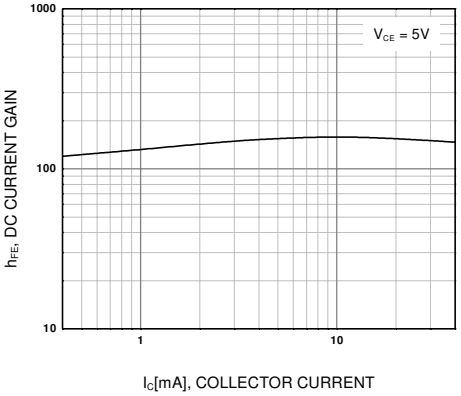


Figure 2. DC current Gain

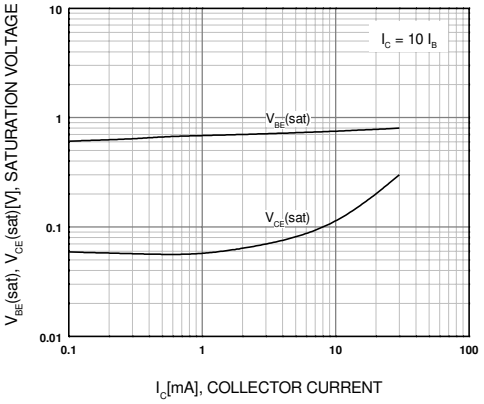


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

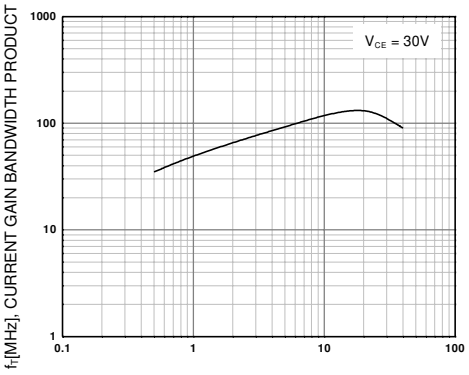


Figure 4. Current Gain Bandwidth Product

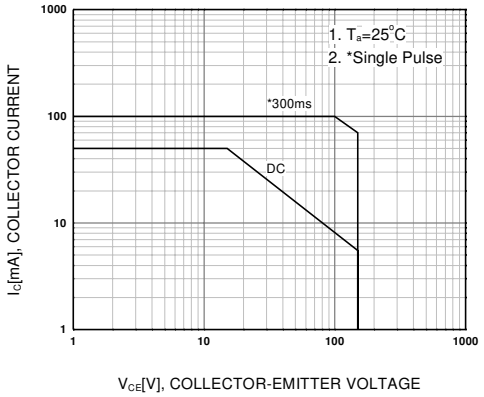


Figure 5. Safe Operating Area

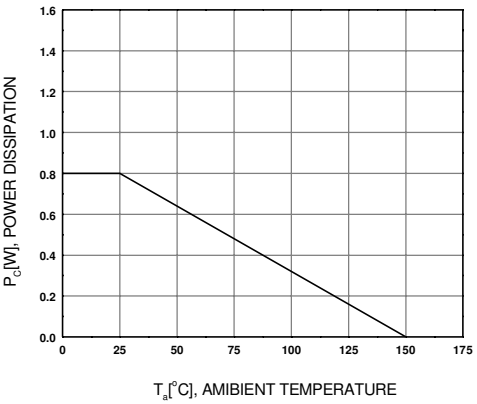
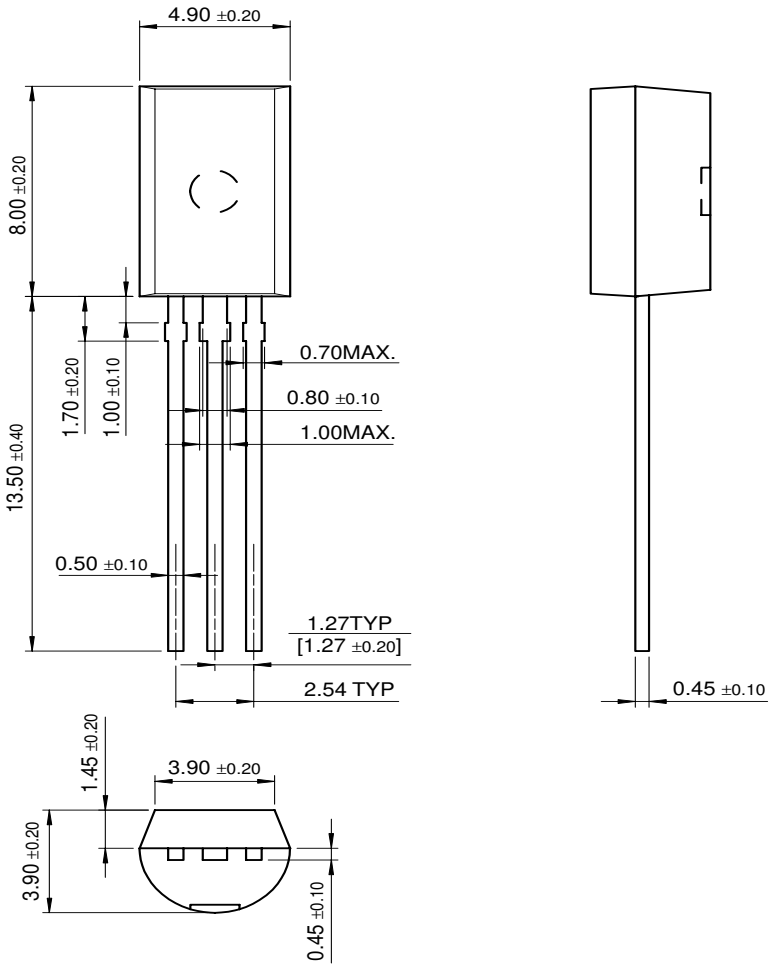


Figure 6. Power Derating

Package Dimensions

TO-92L



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
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EnSigna™	I^2C™	OCX™	RapidConfigure™	UHC™
Across the board. Around the world.™		OCXPro™	RapidConnect™	UltraFET®
The Power Franchise™		OPTOLOGIC®	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
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