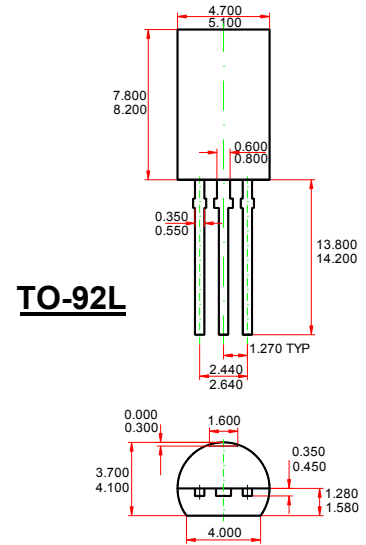




1. EMITTER
2. COLLECTOR
3. BASE

Features

- ✧ Driver stage amplifier
- ✧ Complement to KSC2316



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

Dimensions in inches and (millimeters)

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-800	mA
P_C	Collector Power Dissipation	900	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{mA}$, $I_E = 0$	-120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}$, $I_B = 0$	-120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}$, $I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -120\text{V}$, $I_E = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$	60			
	$h_{FE(2)}$	$V_{CE} = -5\text{V}$, $I_C = -100\text{mA}$	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -5\text{V}$, $I_C = -100\text{mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$			40	pF

CLASSIFICATION OF $h_{FE(2)}$

Rank	O	Y
Range	80-160	120-240

Typical Characteristics

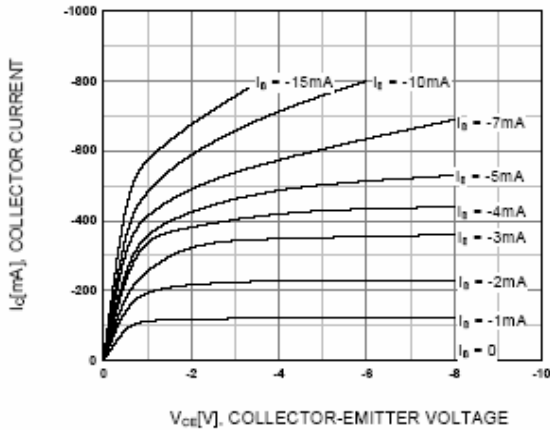


Figure 1. Static Characteristic

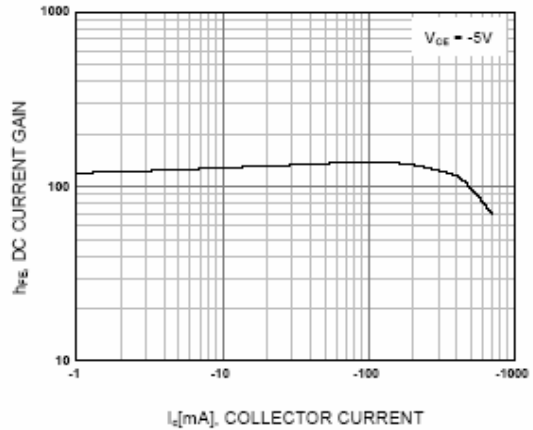


Figure 2. DC current Gain

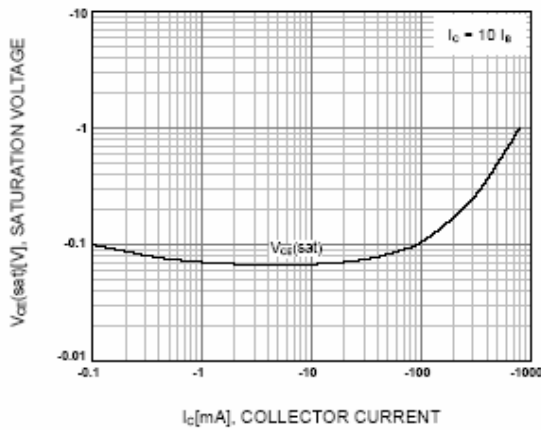


Figure 3. Collector-Emitter Saturation Voltage

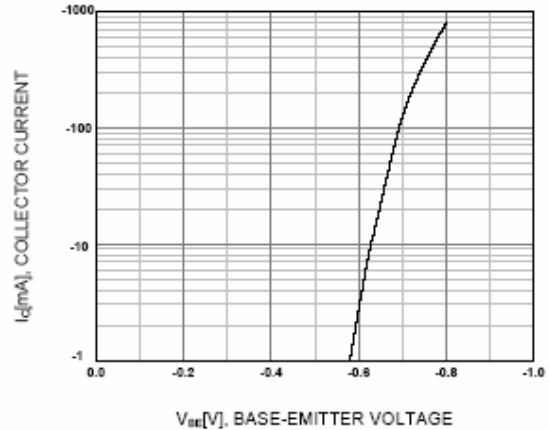


Figure 4. Base-Emitter On Voltage

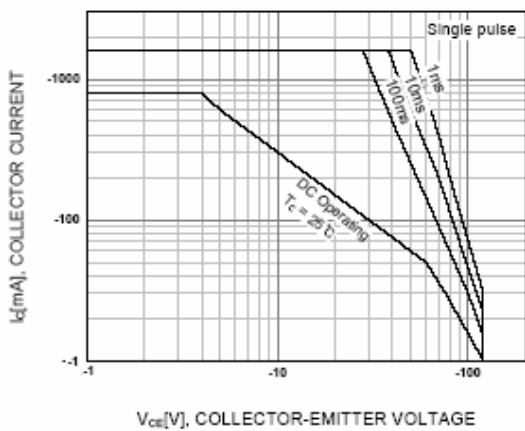


Figure 5. Safe Operating Area

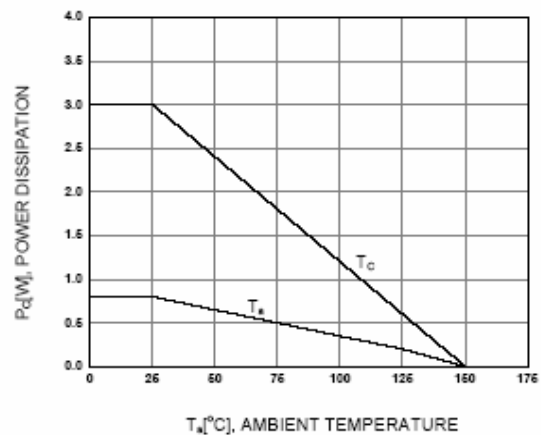


Figure 6. Power Derating

Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92L	Bulk	500pcs/Bag	5000pcs	245×170×100	50,000pcs	525×375×270
TO-92L	Tape	2000pcs/Tap	2000pcs	333×203×42	20,000pcs	493×400×264