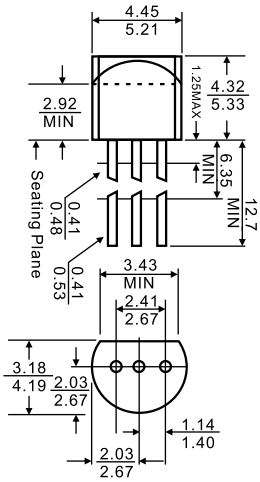
KSA643

TO-92 Bipolar Transistors(PNP)

1. EMITTER
2. BASE
3. COLLECTOR

TO-92



Dimensions in inches and (millimeters)

Features

- ✧ Collector dissipation
- ✧ Complement to KSD261

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	500	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -100uA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -10mA , I_B=0	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -10uA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -25 V , I_E=0			-0.2	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -3 V , I_C=0			-0.2	uA
DC current gain	h_{FE}*	V_{CE}= -1 V, I_C= -100mA	40		400	
Collector-emitter saturation voltage	V_{CE}(sat)*	I_C= -500mA, I_B=- 50mA			-0.4	V
Base-emitter saturation voltage	V_{BE}(sat)*	I_C= -500mA, I_B=- 50mA			-1.3	V

* PULSE TEST

CLASSIFICATION OF h_{FE}

Rank	R	O	Y	G
Range	40-80	70-140	120-240	200-400

Typical Characteristics

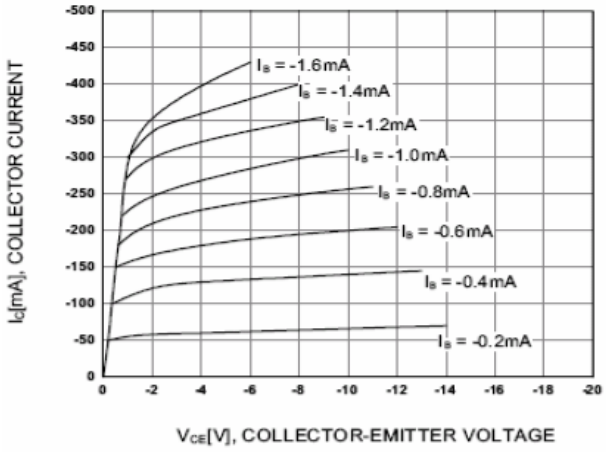


Figure 1. Static Characteristic

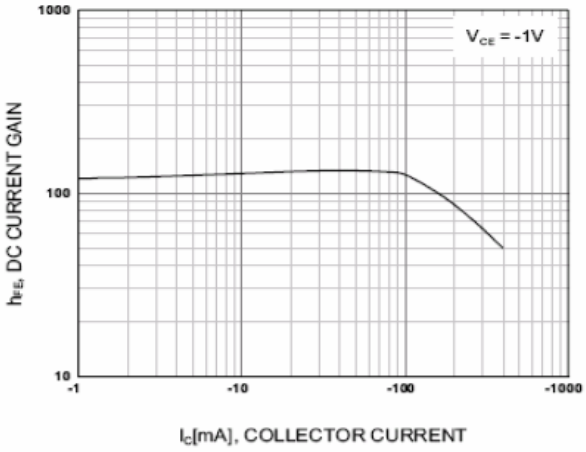


Figure 2. DC current Gain

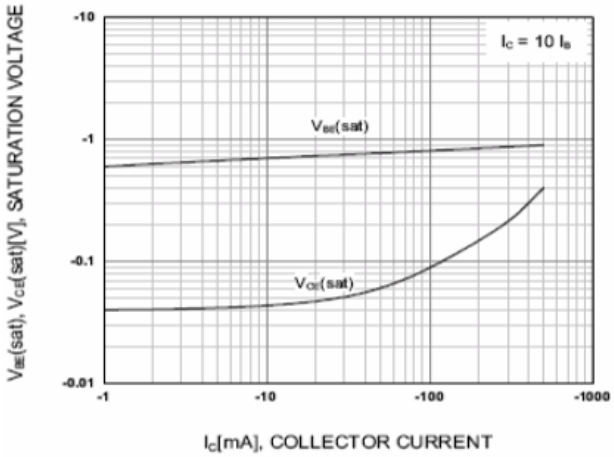


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

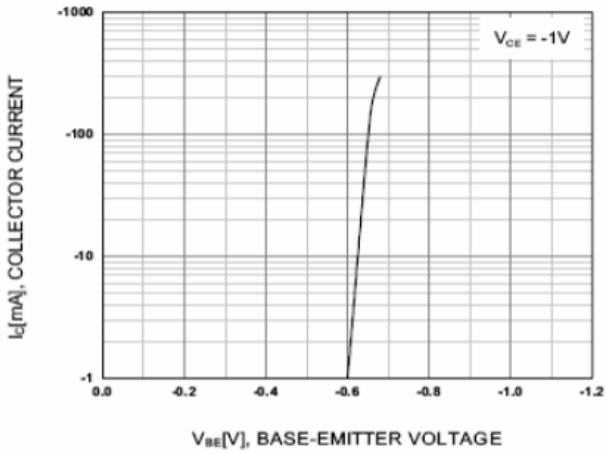


Figure 4. Base-Emitter On Voltage

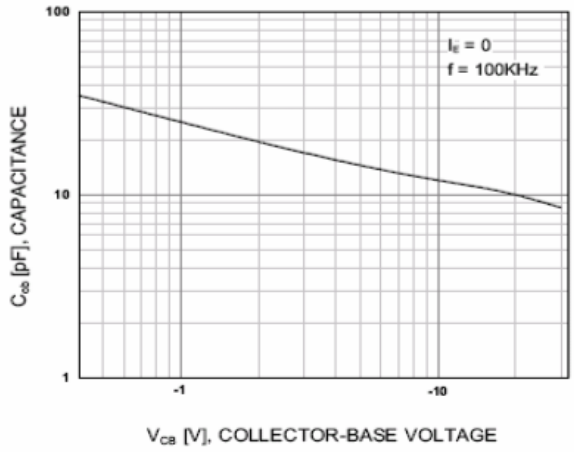


Figure 5. Collector Output Capacitance

Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	Bulk	1000pcs/BP	10,000pcs	245×170×100	100,000pcs	525×375×270
TO-92	Tape	2000pcs/TP	2000pcs	333×162×43	20,000pcs	350×340×250