

## TO-92 Plastic-Encapsulate Transistors

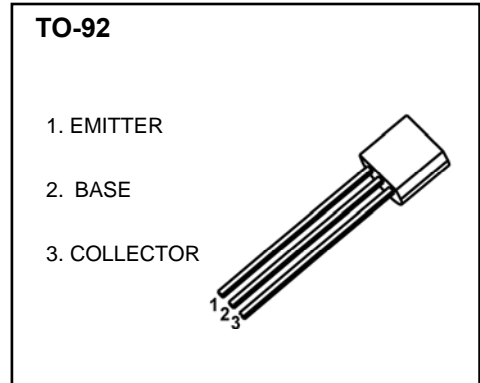
### KSA643 TRANSISTOR (PNP)

#### FEATURE

- Collector dissipation
- Complement to KSD261

#### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	-40	V
V <sub>CE0</sub>	Collector-Emitter Voltage	-20	V
V <sub>EB0</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-500	mA
P <sub>C</sub>	Collector Power Dissipation	500	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C



#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -100uA, I <sub>E</sub> =0	-40			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> =0	-20			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = -10uA, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -25 V, I <sub>E</sub> =0			-0.2	uA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -3 V, I <sub>C</sub> =0			-0.2	uA
DC current gain	h <sub>FE</sub> *	V <sub>CE</sub> = -1 V, I <sub>C</sub> = -100mA	40		400	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub> *	I <sub>C</sub> = -500mA, I <sub>B</sub> =- 50mA			-0.4	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub> *	I <sub>C</sub> = -500mA, I <sub>B</sub> =- 50mA			-1.3	V

\* PULSE TEST

#### CLASSIFICATION OF h<sub>FE</sub>

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