

# Transistors

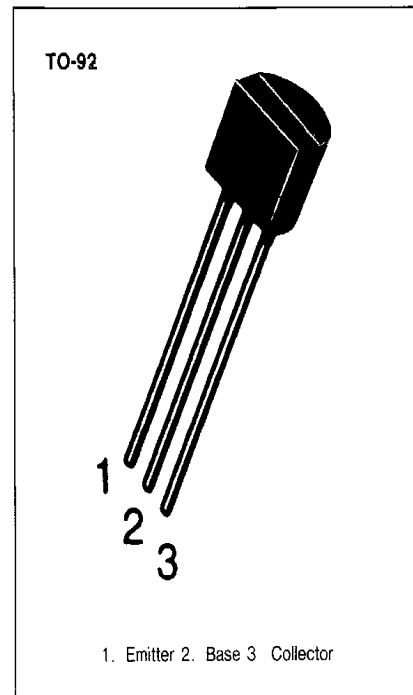
## 2SD261

### LOW FREQUENCY POWER AMPLIFIER

- Complement to KSA643
- Collector Dissipation  $P_C = 500\text{mW}$

### ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	40	V
Collector-Emitter Voltage	$V_{CEO}$	20	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	500	mA
Collector Dissipation	$P_C$	500	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

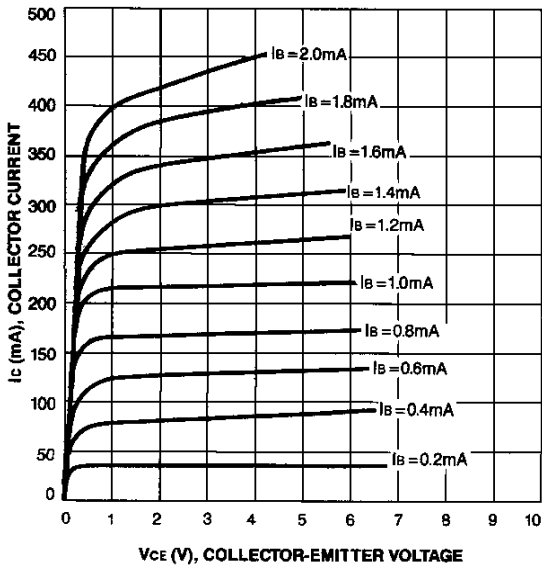
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = 100\mu\text{A}, I_E = 0$	40			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = 10\text{mA}, I_B = 0$	20			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 100\mu\text{A}, I_C = 0$	5			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 25\text{V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 3\text{V}, I_C = 0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = 1\text{V}, I_C = 0.1\text{A}$	40		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 0.5\text{A}, I_B = 0.05\text{A}$		0.18	0.4	V

### $h_{FE}$ CLASSIFICATION

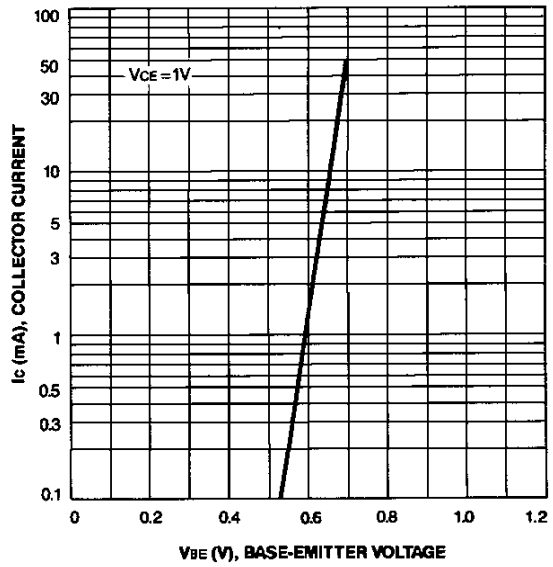
Classification	R	O	Y	G
$h_{FE}$	40-80	70-140	120-240	200-400



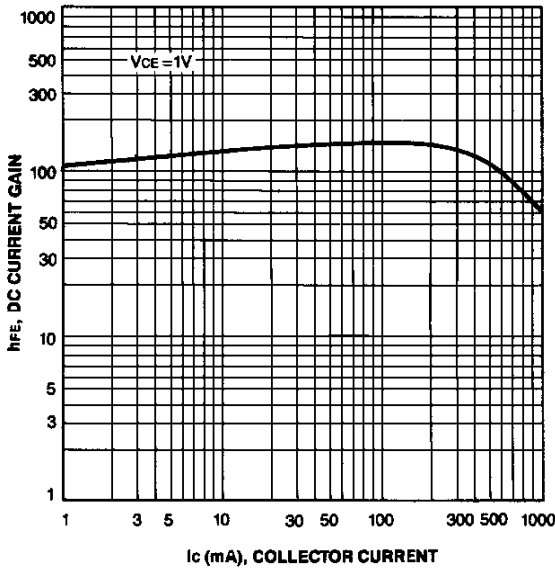
**STATIC CHARACTERISTIC**



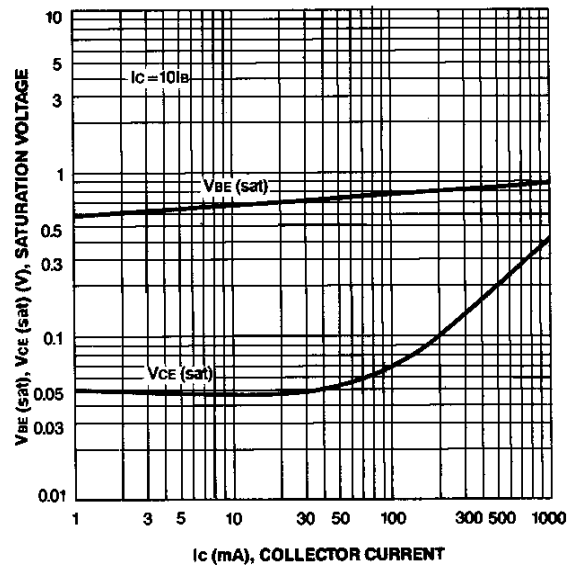
**BASE-EMITTER ON VOLTAGE**



**DC CURRENT GAIN**



**BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE**



**COLLECTOR OUTPUT CAPACITANCE**

