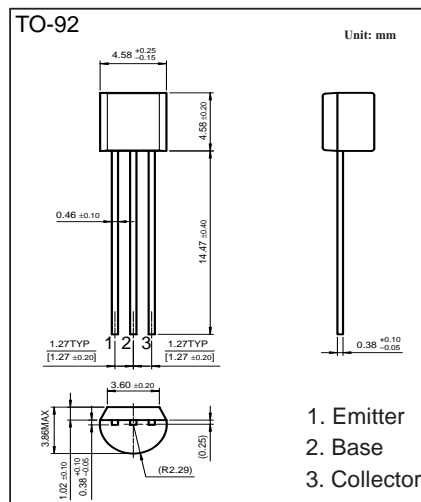


■ Features

- Epitaxial planar die construction.
- Ideal for medium power amplification and switching.
- Complementary PNP type available (A92).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	300	V
Collector-Emitter Voltage	V <sub>CEO</sub>	300	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current -Continuous	I <sub>C</sub>	500	mA
Collector Power Dissipation	P <sub>C</sub>	625	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to 150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-to-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 100 μA, I <sub>E</sub> =0	300			V
Collector-to-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1 mA, I <sub>B</sub> =0	300			V
Emitter-to-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 100 μA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 200 V, I <sub>E</sub> =0			0.25	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5 V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 1mA	60			
		V <sub>CE</sub> = 10V, I <sub>C</sub> = 10mA	80		250	
		V <sub>CE</sub> = 10V, I <sub>C</sub> = 30mA	75			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =20 mA, I <sub>B</sub> = 2mA			0.2	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 20 mA, I <sub>B</sub> = 2mA			0.9	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 20V, I <sub>C</sub> = 10mA, f=30MHz	50			MHz

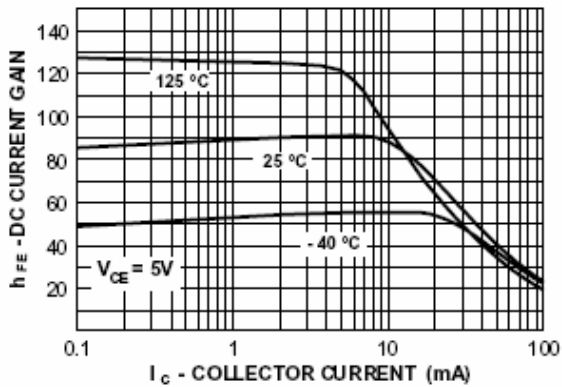
■ hFE Classification

Rank	A	B1	B2	C
h <sub>FE</sub>	80 to 100	100 to 150	150 to 200	200 to 250

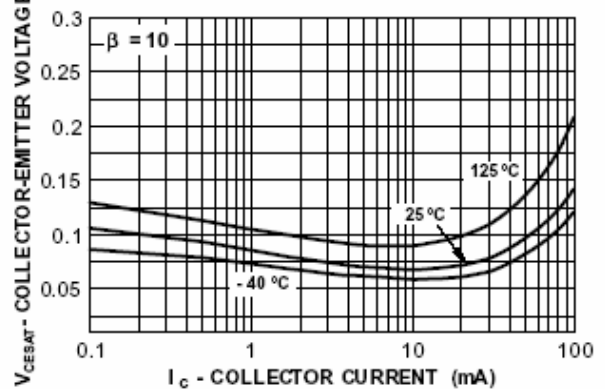


■ Typical Characteristics

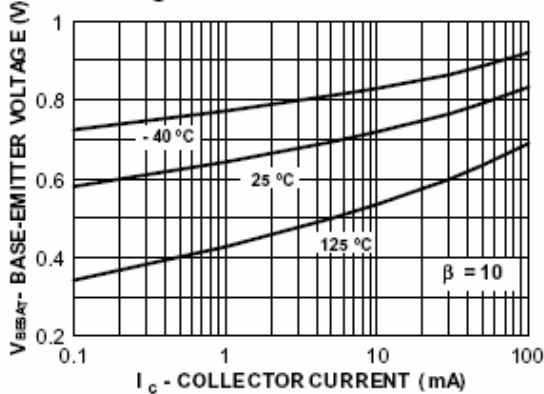
DC Current Gain vs Collector Current



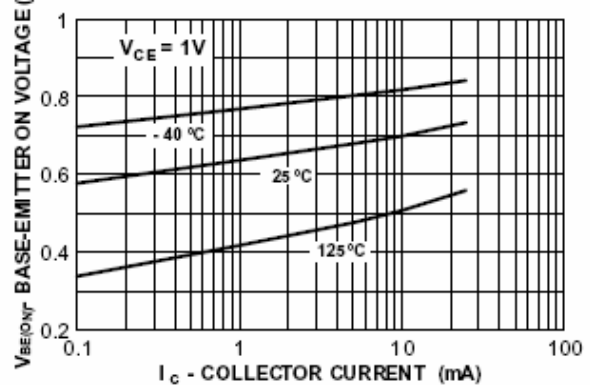
Collector-Emitter Saturation Voltage vs Collector Current



Base-Emitter Saturation Voltage vs Collector Current



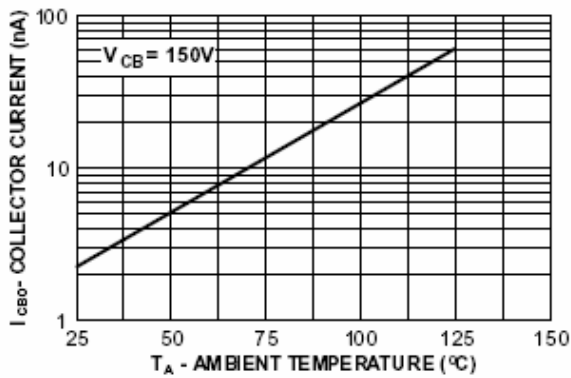
Base-Emitter ON Voltage vs Collector Current



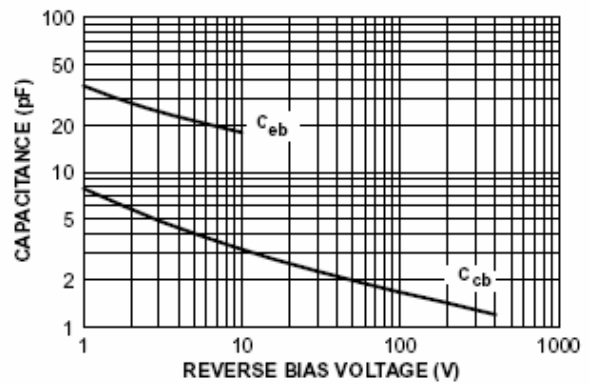


■ Typical Characteristics

**Collector-Cutoff Current vs Ambient Temperature**



**Collector-Base and Emitter-Base Capacitance vs Reverse Bias Voltage**



**Power Dissipation vs Ambient Temperature**

