

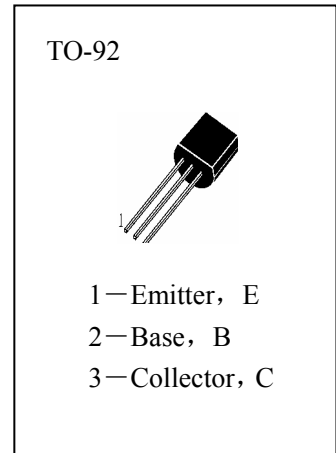


# H1674

■ TV PIF AMPLIFIER, FM TUNER RF AMPLIFIER,  
MIXER, OSCILLATOR

## ■ ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

- T<sub>stg</sub>—Storage Temperature..... -55~150°C
- T<sub>j</sub>—Junction Temperature.....150°C
- P<sub>C</sub>—Collector Dissipation.....250mW
- V<sub>CB0</sub>—Collector-Base Voltage.....30V
- V<sub>CEO</sub>—Collector-Emitter Voltage.....20V
- V<sub>EBO</sub>—Emitter-Base Voltage.....4V
- I<sub>C</sub>—Collector Current.....20mA



## ■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
I <sub>CBO</sub>	Collector Cut-off Current			0.1	μ A	V <sub>CB</sub> =30V, I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter Cut-off Current			0.1	μ A	V <sub>EB</sub> =4V, I <sub>C</sub> =0
h <sub>FE</sub>	DC Current Gain	40		240		V <sub>CE</sub> =6V, I <sub>C</sub> =1mA
V <sub>CE(sat)</sub>	Collector- Emitter Saturation Voltage		0.1	0.3	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
V <sub>BE(on)</sub>	Base-Emitter On Voltage		0.72		V	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA
BV <sub>CB0</sub>	Collector-Base Breakdown Voltage	30			V	I <sub>C</sub> =10 μ A, I <sub>E</sub> =0
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	20			V	I <sub>C</sub> =5mA, I <sub>B</sub> =0
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	4			V	I <sub>E</sub> =10 μ A, I <sub>C</sub> =0
f <sub>T</sub>	Current Gain-Bandwidth Product	400	600		MHz	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA
C <sub>ob</sub>	Output Capacitance		1.2		pF	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=1MHz

## ■ h<sub>FE</sub> Classification

R	O	Y
40—80	70—140	120—240

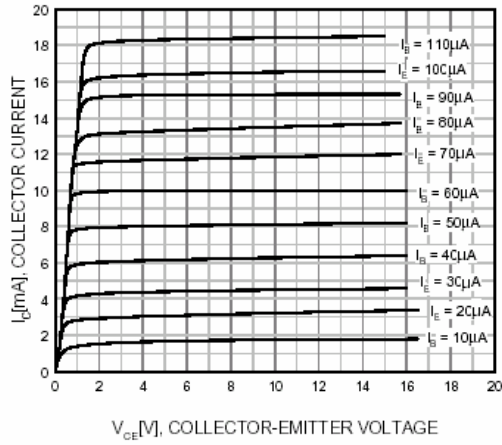
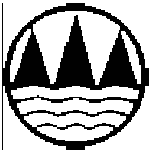


Figure 1. Static Characteristic

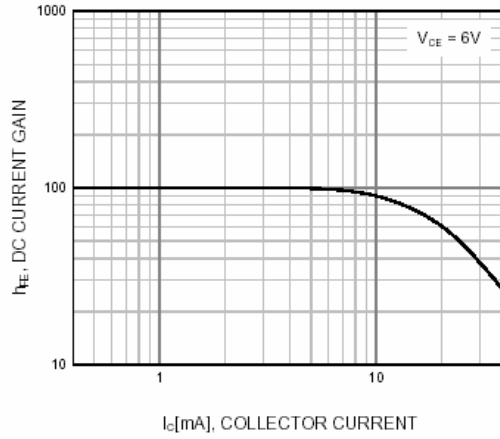


Figure 2. DC current Gain

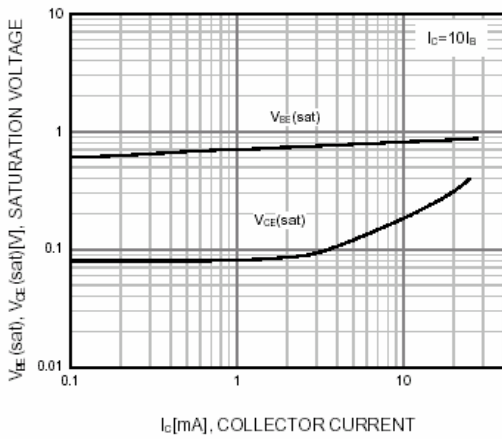


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

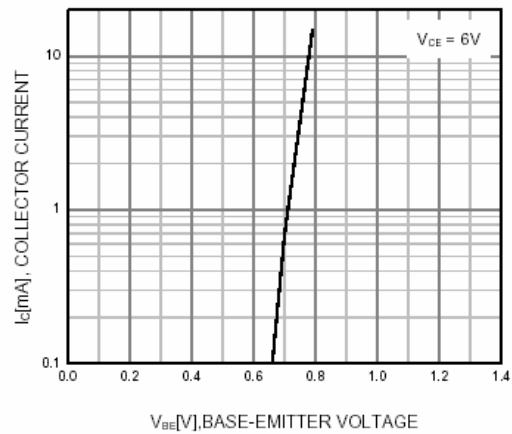


Figure 4. Base-Emitter On Voltage

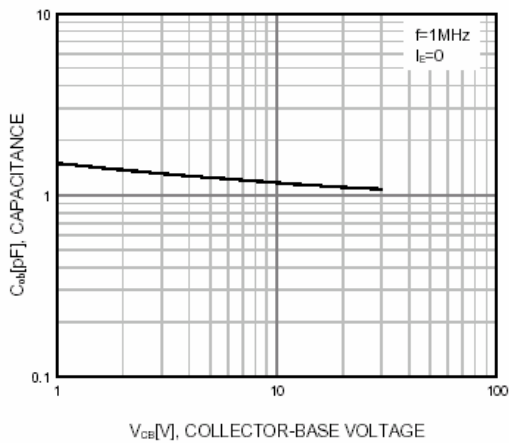


Figure 5. Collector Output Capacitance

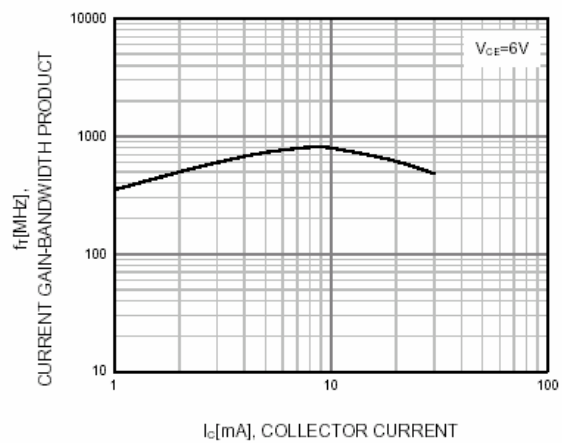


Figure 6. Current Gain Bandwidth Product