

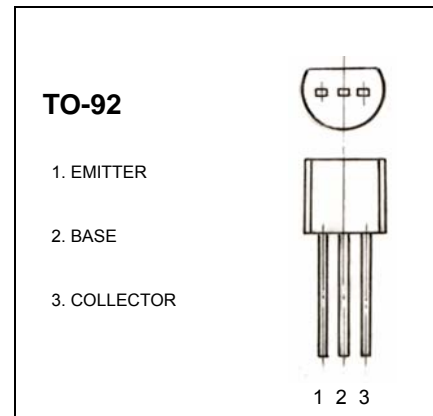
## 2SC1675 TRANSISTOR (NPN)

### FEATURES

- 2SC1675 is designed for use in AM converter AM/FM if amplifier and local oscillator of AM/FM tuner

### MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	50	V
$V_{CEO}$	Collector-Emitter Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	0.05	A
$P_C$	Collector Power Dissipation	0.25	W
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^{\circ}\text{C}$



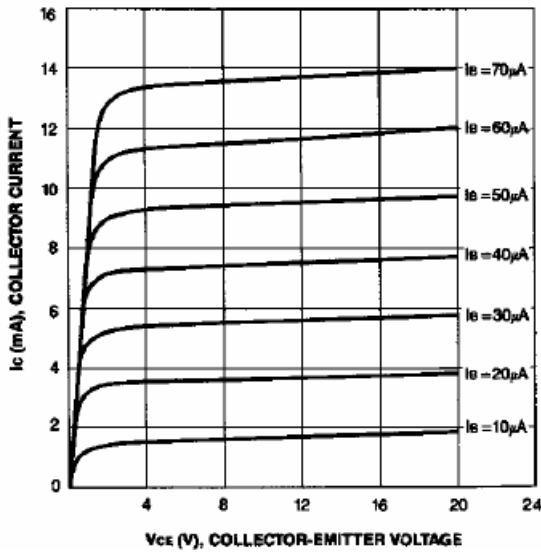
### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=5\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=50\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.3	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$			0.75	V
Transition frequency	$f_T$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	150			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$			2.5	pF

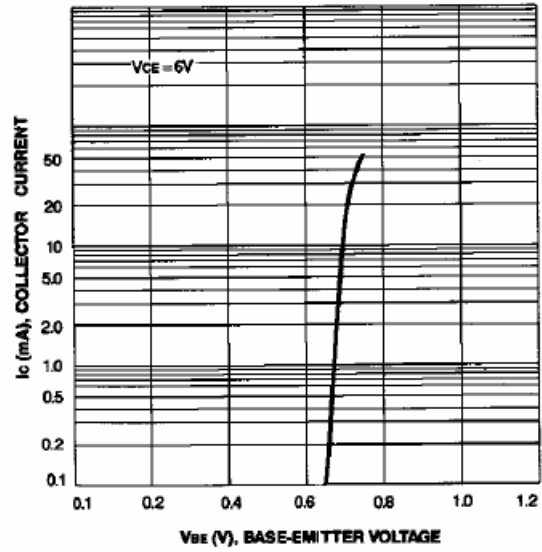
### CLASSIFICATION OF $h_{FE}$

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

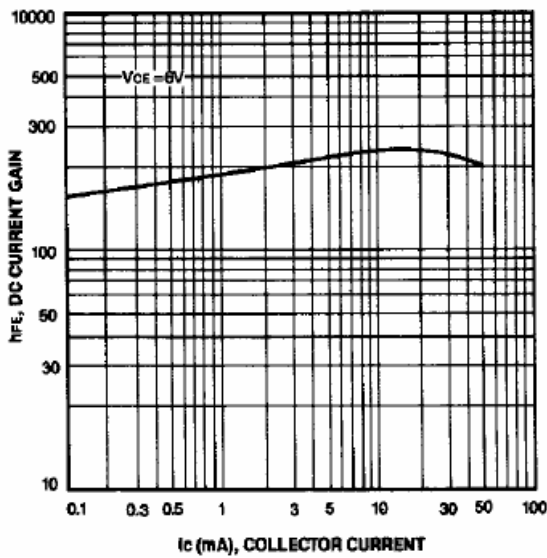
**STATIC CHARACTERISTIC**



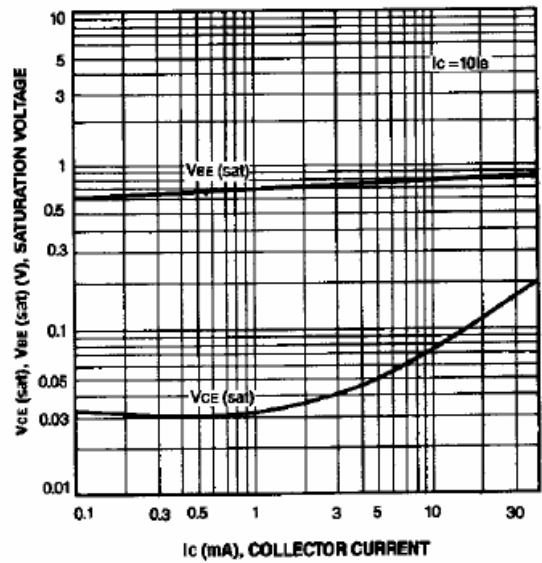
**BASE-EMITTER ON VOLTAGE**



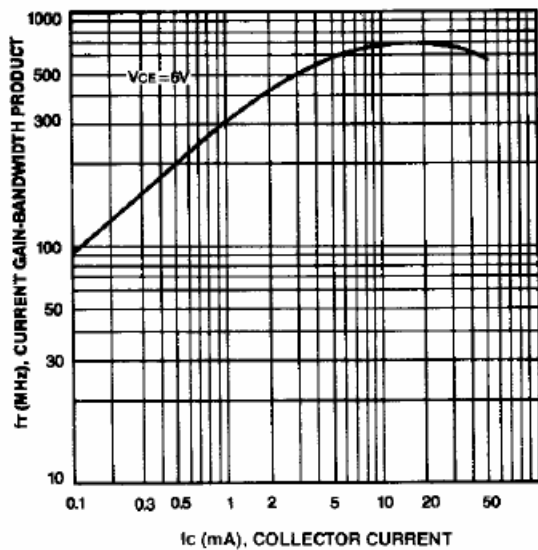
**DC CURRENT GAIN**



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



**CURRENT GAIN-BANDWIDTH PRODUCT**



**COLLECTOR INPUT CAPACITANCE  
COLLECTOR OUTPUT CAPACITANCE**

