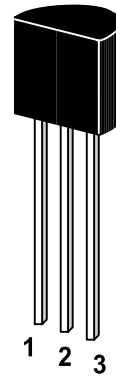


# ST 2SC1675

NPN Silicon Epitaxial Planar Transistor  
FM/AM RF AMP, MIX, CONV, OSC, IF

The transistor is subdivided into three groups, R, O, Y,  
according to its DC current gain.

On special request, these transistors can be  
manufactured in different pin configurations.



1. Emitter 2. Base 3. Collector

TO-92 Plastic Package  
Weight approx. 0.19g

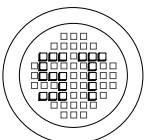
## FEATURES:

- Collector-Base Voltage:  $V_{CBO}=30V$
- High Current Gain Bandwidth Product:  $f_T=300MHz$  (TYP.)
- Low Collector Capacitance:  $C_{OB}=2.0pF$  (TYP.)
- Suffix “-C” means Center Collector (1. Emitter 2. Collector 3. Base)

## Absolute Maximum Ratings ( $T_a = 25^\circ C$ )

	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	50	mA
Collector Power Dissipation	$P_{tot}$	250	mW
Junction Temperature	$T_j$	150	?
Storage Temperature	$T_S$	-55 to +150	?

G S P FORM A IS AVAILABLE



®

РАДИОТЕХ-ТРЕЙД

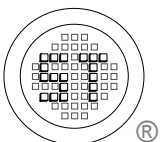
Тел.: (495) 795-0805  
Факс: (495) 234-1603  
Эл. почта: info@rct.ru  
Веб: www.rct.ru

# ST 2SC1675

## Characteristics at $T_a=25\text{ }^\circ\text{C}$

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=6\text{V}$ , $I_C=1\text{mA}$	R	$h_{FE}$	40	-	80	-
	O	$h_{FE}$	70	-	140	-
	Y	$h_{FE}$	120	-	240	-
Collector-Emitter Saturation Voltage at $I_C=10\text{mA}$ , $I_B=1\text{mA}$		$V_{CE(sat)}$	-	0.08	0.3	V
Base-Emitter On Voltage at $V_{CE}=6\text{V}$ , $I_C=1\text{mA}$		$V_{BE(on)}$	-	0.67	0.75	V
Collector-Base Breakdown Voltage at $I_C=10\mu\text{A}$ , $I_E=0$		$BV_{CBO}$	50	-	-	V
Collector-Emitter Breakdown Voltage at $I_C=5\text{mA}$ , $I_B=0$		$BV_{CEO}$	30	-	-	V
Emitter-Base Breakdown Voltage at $I_E=10\mu\text{A}$ , $I_C=0$		$BV_{EBO}$	5	-	-	V
Collector Cut-off Current at $V_{CB}=50\text{V}$ , $I_E=0$		$I_{CBO}$	-	-	0.1	$\mu\text{A}$
Emitter Cut-off Current at $V_{EB}=5\text{V}$ , $I_C=0$		$I_{EBO}$	-	-	0.1	$\mu\text{A}$
Current Gain Bandwidth Product at $V_{CE}=6\text{V}$ , $I_C=1\text{mA}$		$f_T$	150	300	-	MHz
Output Capacitance at $V_{CB}=6\text{V}$ , $I_E=0$ , $f=1\text{MHz}$		$C_{ob}$	-	2.0	2.5	pF

G S P FORM A IS AVAILABLE



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 555-1996-01-50-761

Dated : 19/12/2003

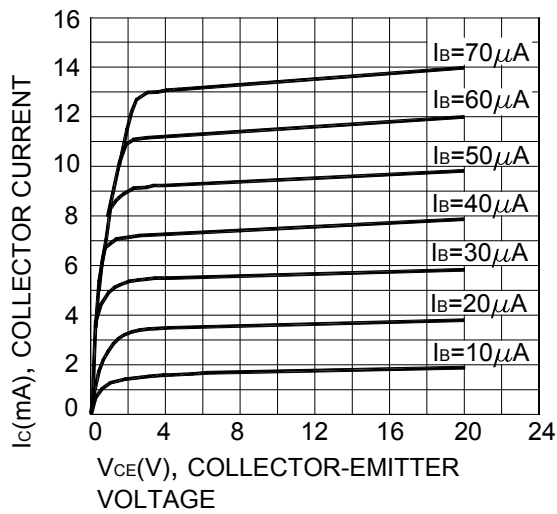


Figure 1. Static Characteristic

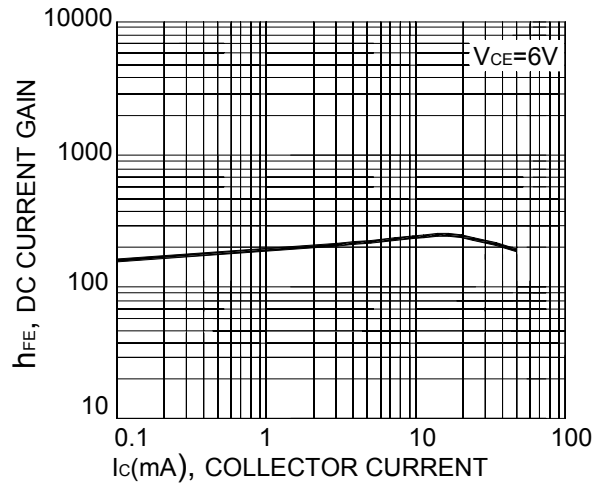


Figure 2. DC Current Gain

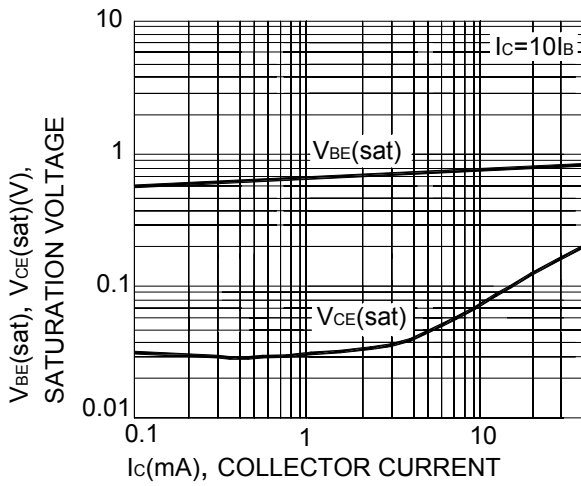


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

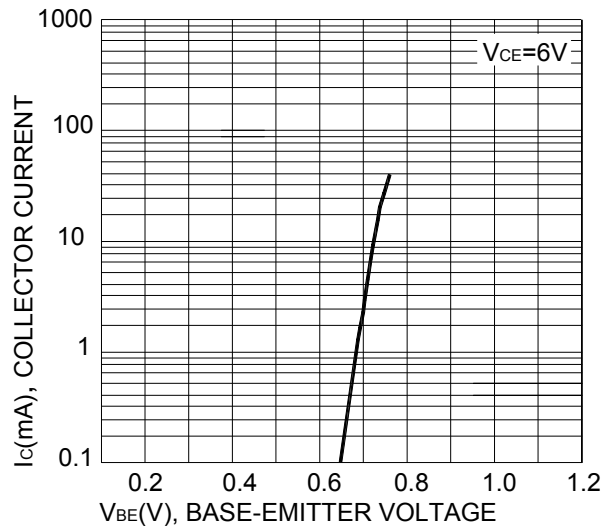


Figure 4. Base-Emitter On Voltage

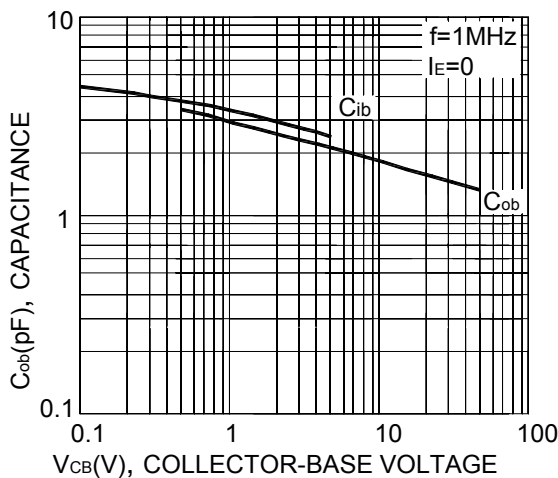


Figure 5. Input Output Capacitance

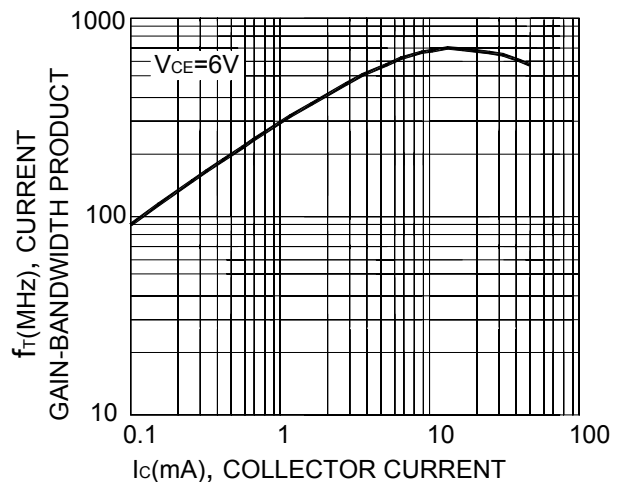
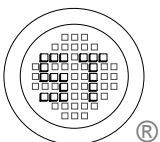


Figure 6. Current Gain Bandwidth Product



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