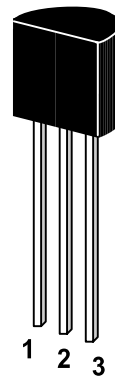


ST 2SC1675

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

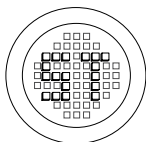
FEATURES:

- Collector-Base Voltage: $V_{CE0}=30V$
- 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

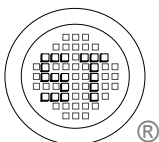
Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

ST 2SC1675

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

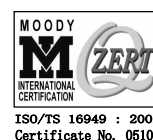
		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$	R	h_{FE}	40	-	80	-
	O	h_{FE}	70	-	140	-
	Y	h_{FE}	120	-	240	-
Collector-Emitter Saturation Voltage at $I_C=10\text{mA}$, $I_B=1\text{mA}$		$V_{CE(sat)}$	-	0.08	0.3	V
Base-Emitter On Voltage at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$		$V_{BE(on)}$	-	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	μA
Emitter Cut-off Current at $V_{EB}=5\text{V}$, $I_C=0$		I_{EBO}	-	-	0.1	μA
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. 555-1995-01-01-01

Dated : 19/12/2003

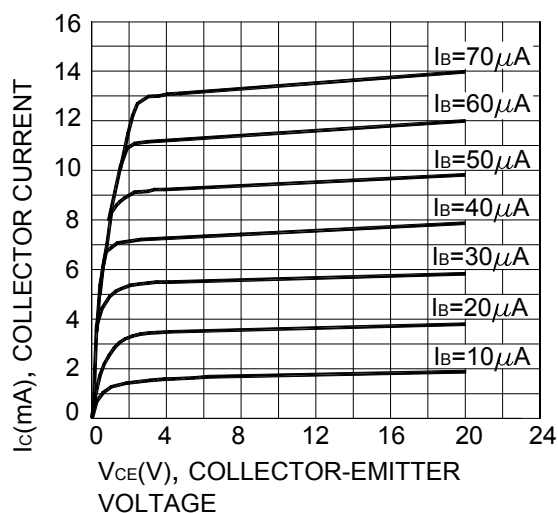


Figure 1. Static Characteristic

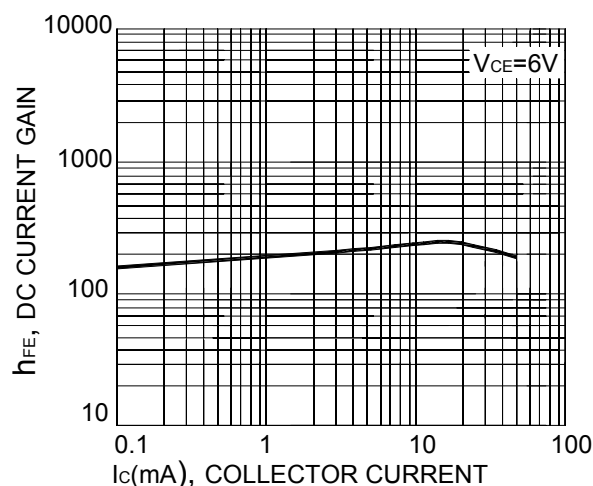
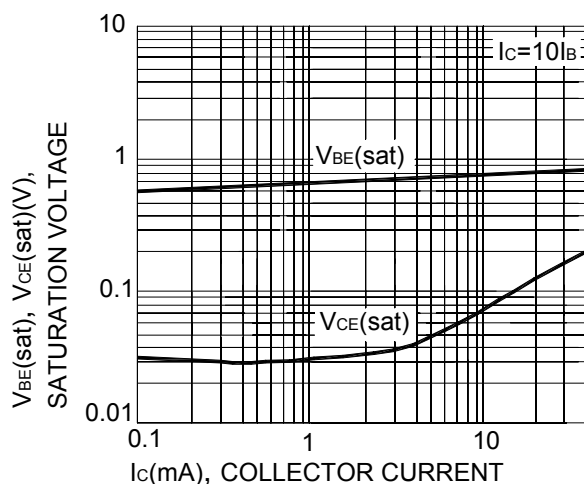


Figure 2. DC Current Gain



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

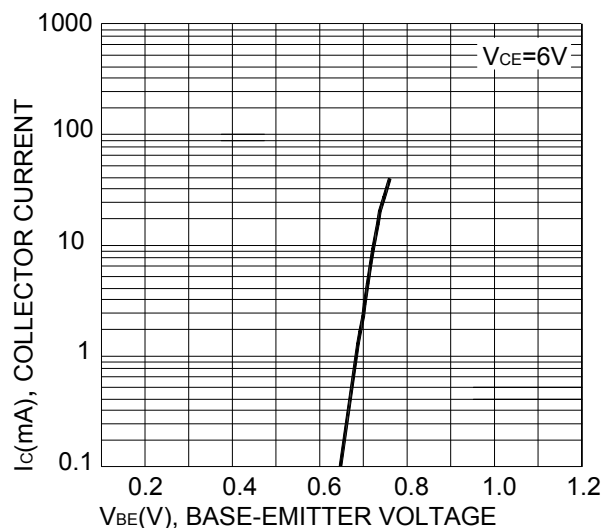


Figure 4. Base-Emitter On Voltage

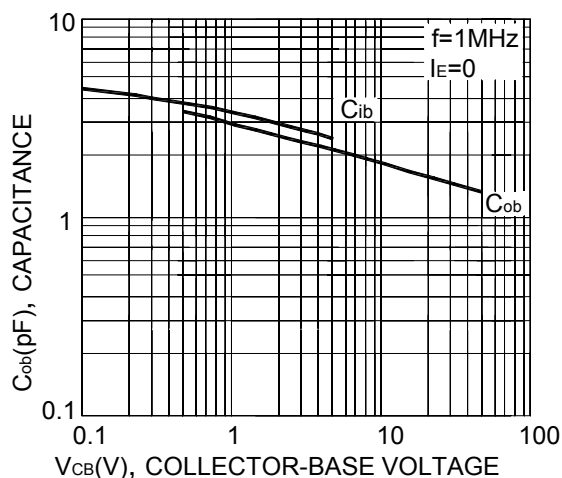


Figure 5. Input Output Capacitance

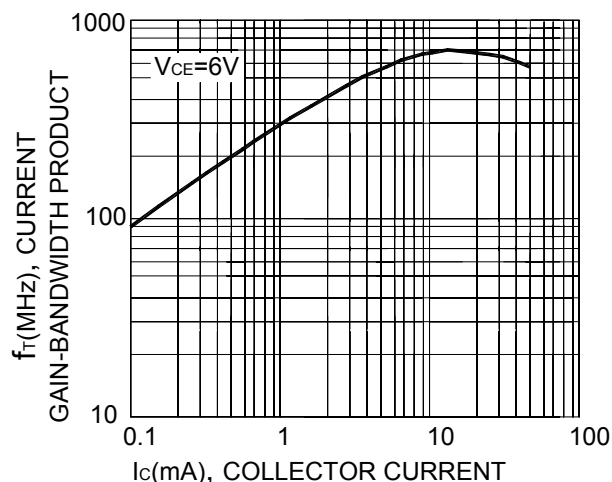
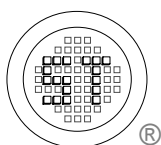


Figure 6. Current Gain Bandwidth Product



SEMTECH ELECTRONICS LTD.

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

