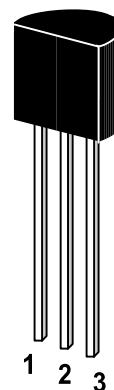


# ST 2SC1907

NPN Silicon Epitaxial Planar Transistor  
for UHF TV Tuner and Local Oscillator.

The transistor is subdivided into one group,  
according to its DC current gain.

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

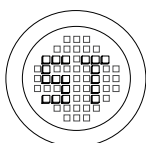


1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package  
Weight approx. 0.19g

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$V_{\text{CBO}}$	30	V
Collector Emitter Voltage	$V_{\text{CEO}}$	19	V
Emitter Base Voltage	$V_{\text{EBO}}$	2	V
Collector Current	$I_{\text{C}}$	50	mA
Emitter Current	$-I_{\text{E}}$	50	mA
Power Dissipation	$P_{\text{tot}}$	300	mW
Junction Temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{s}}$	-55 to +150	$^\circ\text{C}$

G S P FORM A IS AVAILABLE



®

РАДИОТЕХ

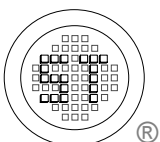
Тел.: (495) 795-0805  
Факс: (495) 234-1603  
Эл. почта: info@rct.ru  
Веб: www.rct.ru

# ST 2SC1907

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

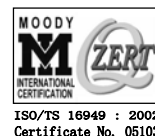
	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=10\text{V}$ , $I_C=10\text{mA}$ Current Gain Group	$h_{FE}$	40	-	-	-
Collector Base Breakdown voltage at $I_C=10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V
Collector Emitter Breakdown Voltage at $I_C=3\text{mA}$	$V_{(BR)CEO}$	19	-	-	V
Emitter Base Breakdown Voltage at $I_E=10\text{ }\mu\text{A}$	$V_{(BR)EBO}$	2	-	-	V
Collector Cutoff Current at $V_{CB}=10\text{V}$	$I_{CBO}$	-	-	0.5	$\mu\text{A}$
Collector Emitter Saturation Voltage at $I_C=20\text{mA}$ , $I_B=4\text{mA}$	$V_{CE(sat)}$	-	0.2	1	V
Transition Frequency at $V_{CE}=10\text{V}$ , $I_C=10\text{mA}$	$f_T$	900	1100	-	MHz
Collector Output Capacitance at $V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	1	2	pF
Base Time Constant at $V_{CB}=10\text{V}$ , $I_C=10\text{mA}$ $f=31.8\text{ MHz}$	$r_{bb'} \cdot C_c$	-	10	25	ps
Oscillation Output Power at $V_{CB}=10\text{V}$ , $I_C=10\text{mA}$ $f=930\text{ MHz}$	$P_{out}$	-	8	-	mW

**G S P FORM A IS AVAILABLE**

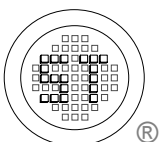
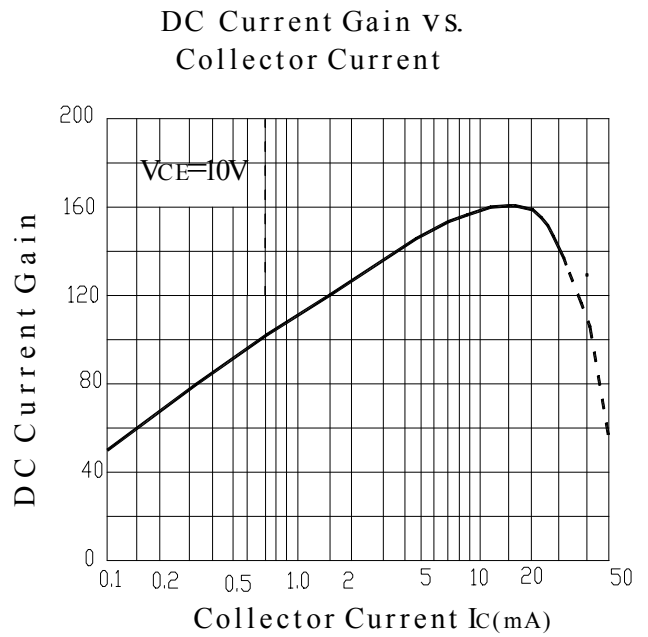
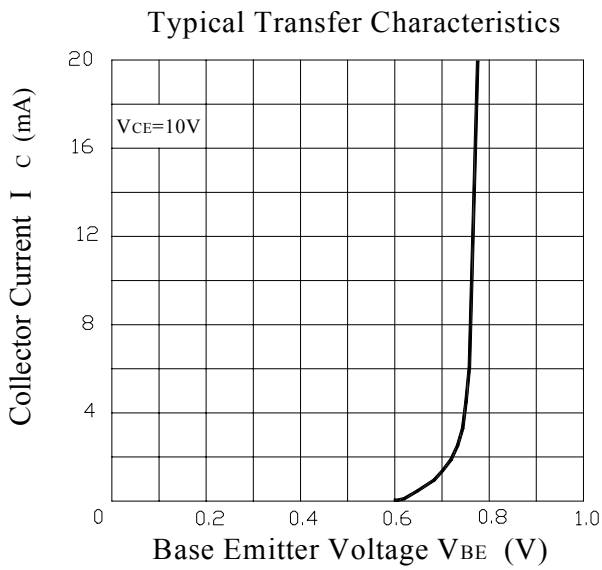
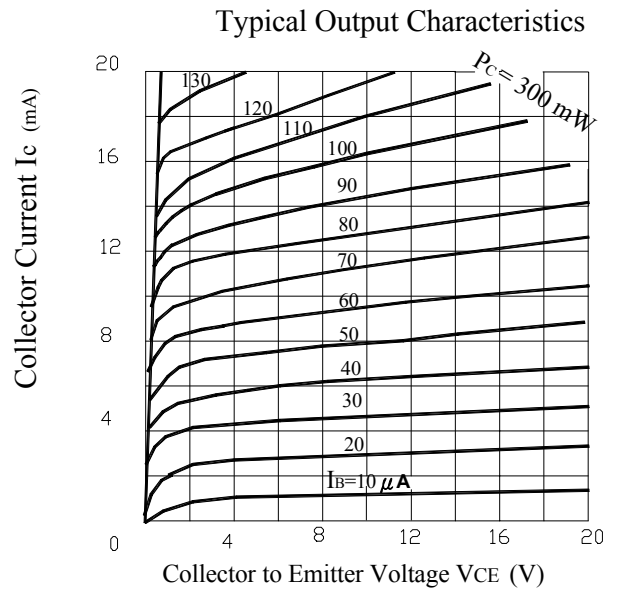
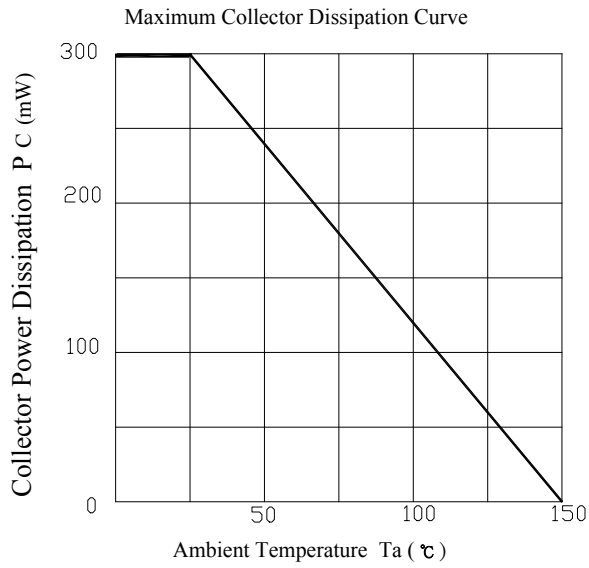


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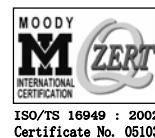
(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



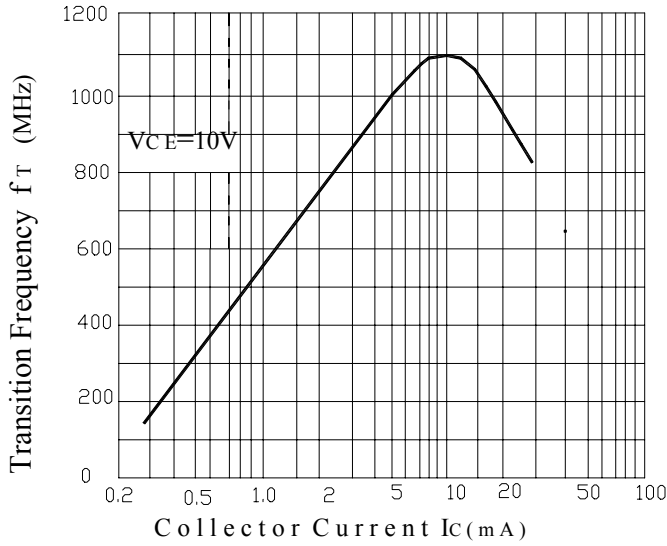
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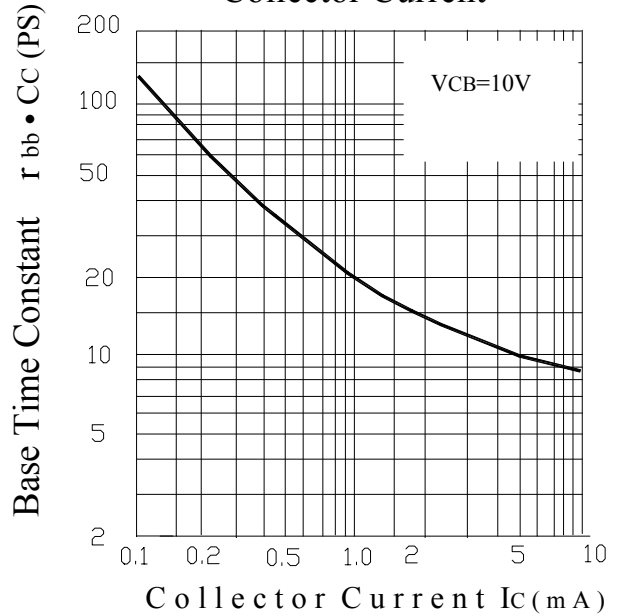
**SEMTECH ELECTRONICS LTD.**  
 (Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



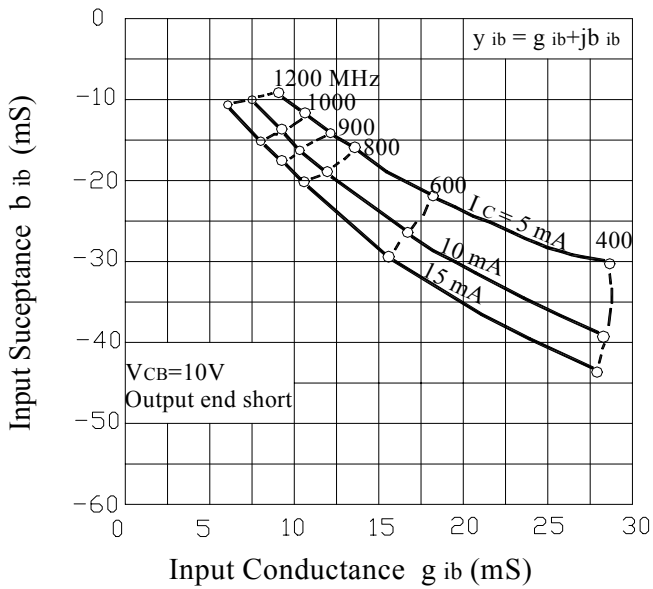
Transition Frequency vs. Collector Current



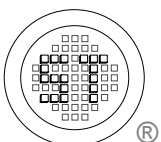
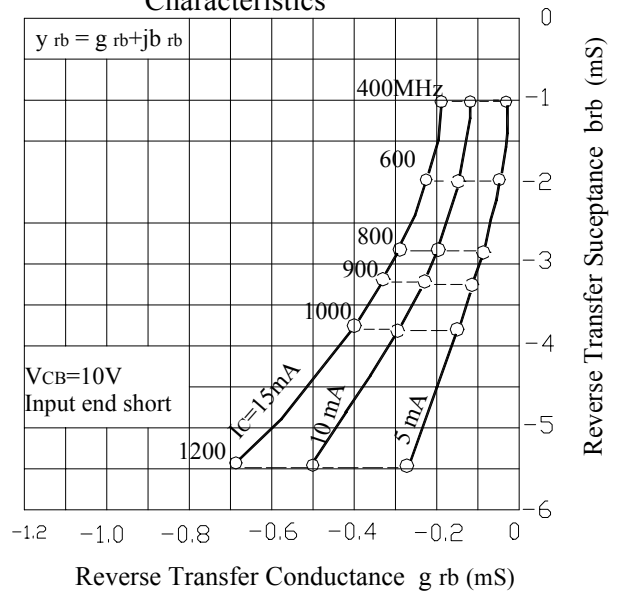
Base Time Constant vs Collector Current



Input Admittance Characteristics

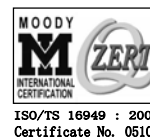


Reverse Transfer Admittance Characteristics

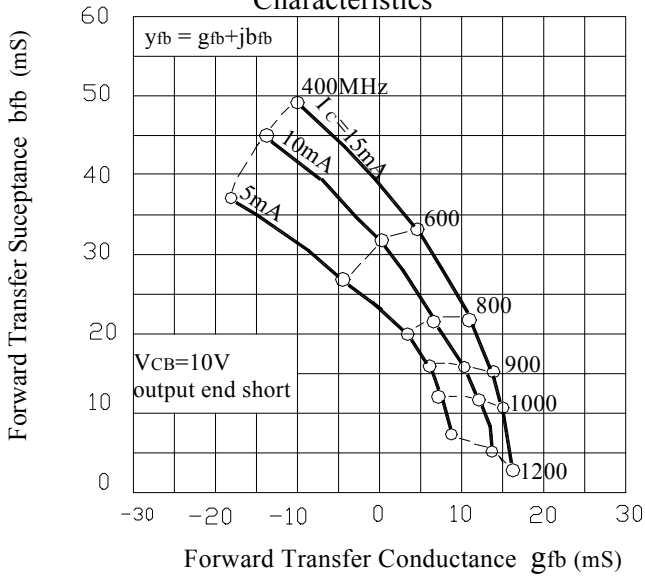


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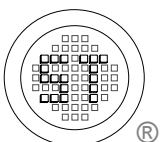
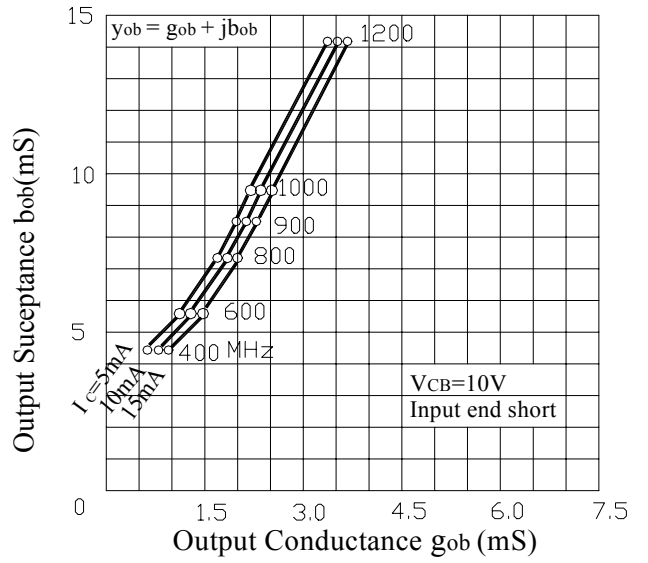
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Forward Transfer Admittance Characteristics



Output Admittance Characteristics



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