

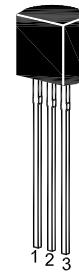
# 2SC535

## NPN Silicon Epitaxial Planar Transistor

VHF amplifier, mixer, local oscillator.

The transistor is subdivided into two groups B and C according to its DC current gain

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



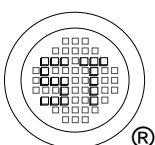
1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	30	V
Collector Emitter Voltage	$V_{CEO}$	20	V
Emitter Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	20	mA
Power Dissipation	$P_{tot}$	100	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 6\text{ V}$ , $I_C = 1\text{ mA}$	Current Gain Group B C	$h_{FE}$	60	-	120	-
		$h_{FE}$	100	-	200	-
Collector Base Cutoff Current at $V_{CB} = 10\text{ V}$	$I_{CBO}$	-	-	500	nA	
Collector Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V	
Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	20	-	-	V	
Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$	$V_{(BR)EBO}$	4	-	-	V	
Gain Bandwidth Product at $V_{CE} = 6\text{ V}$ , $I_C = 5\text{ mA}$	$f_T$	-	940	-	MHz	
Output Capacitance at $V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	-	1.2	pF	



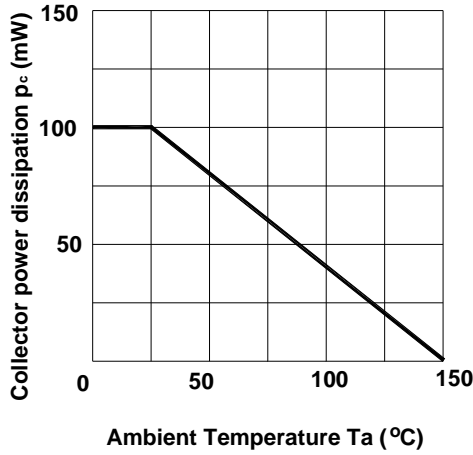
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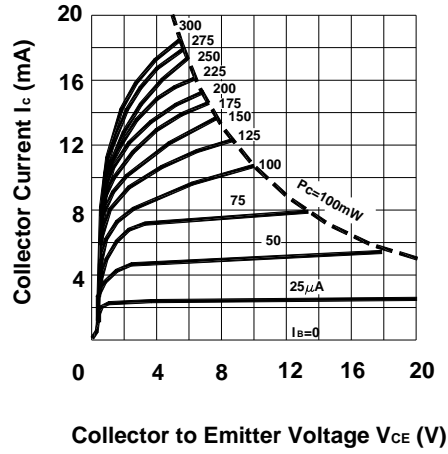
ISO/TS 16949 : 2009 Certificate No. 160713000  
 ISO14001 : 2004 Certificate No. 7116  
 ISO 9001 : 2008 Certificate No. 60713410  
 BS-OHSAS 18001 : 2007 Certificate No. 7116  
 IECQ QC 080000 Certificate No. PRC-18P4-145-1

Dated: 18/08/2016 Rev: 02

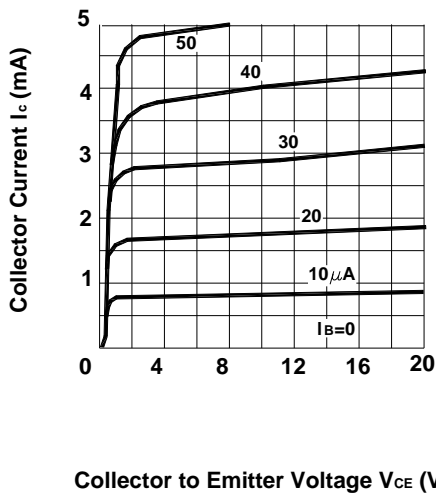
Maximum Collector Dissipation Curve



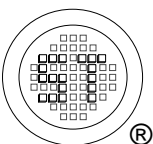
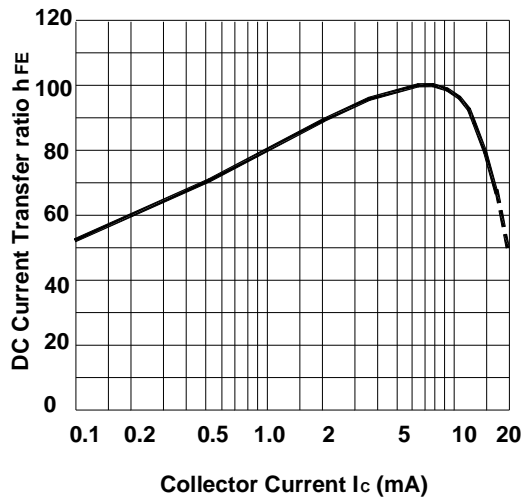
Typical Output Characteristics



Typical Output Characteristics



DC Current Transfer Ratio vs. Collector Current



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