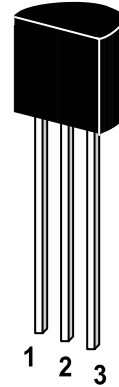


ST 2SC4115

NPN Silicon Epitaxial Planar Transistor

The transistor is subdivided into three groups, Q, R and S, 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

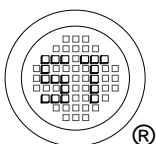
Features

- Low $V_{CE(sat)}$
- Excellent current gain characteristics

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

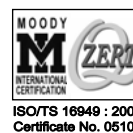
	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A(DC)
		5	A(Pulse)*
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$

*Notes: Single pulse $P_w=10\text{ms}$



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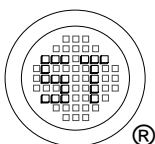
Dated : 05/04/2003

ST 2SC4115

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=2\text{V}$, $I_C=100\text{mA}$					
Current Gain Group Q	h_{FE}	120	-	270	
R	h_{FE}	180	-	390	
S	h_{FE}	270	-	560	
Collector Base Breakdown voltage at $I_C=50\text{ }\mu\text{A}$	$V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $I_C=1\text{mA}$	$V_{(BR)CEO}$	20	-	-	V
Emitter Base Breakdown Voltage at $I_E=50\text{ }\mu\text{A}$	$V_{(BR)EBO}$	6	-	-	V
Collector Cutoff Current at $V_{CB}=30\text{V}$	I_{CBO}	-	-	0.1	μA
Collector Cutoff Current at $V_{EB}=5\text{V}$	I_{EBO}	-	-	0.1	μA
Collector Emitter Saturation Voltage* at $I_C=2\text{A}$, $I_B=100\text{mA}$	$V_{CE(sat)}$	-	0.2	0.5	V
Transition Frequency at $V_{CE}=2\text{V}$, $I_E=-500\text{mA}$, $f=100\text{MHz}$	f_T	-	290	-	MHz
Collector Output Capacitance at $V_{CE}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	25	-	pF

*Note: Measured using pulse current.

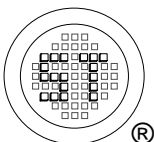
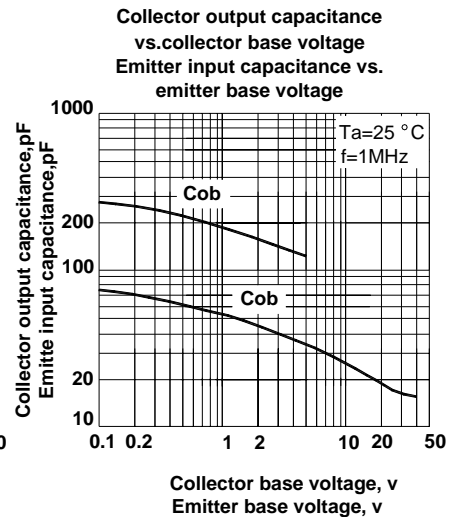
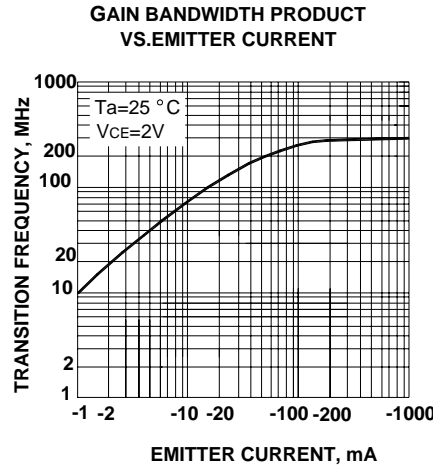
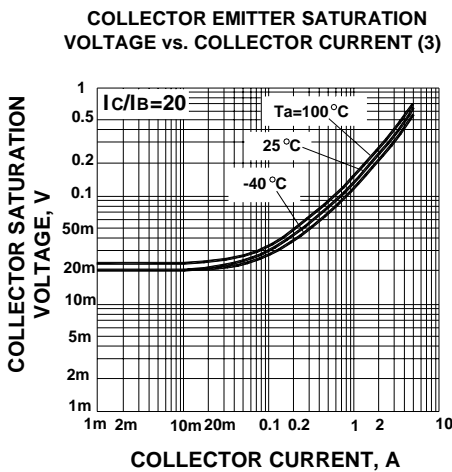
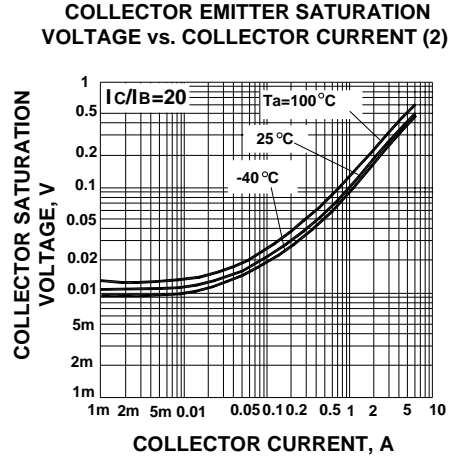
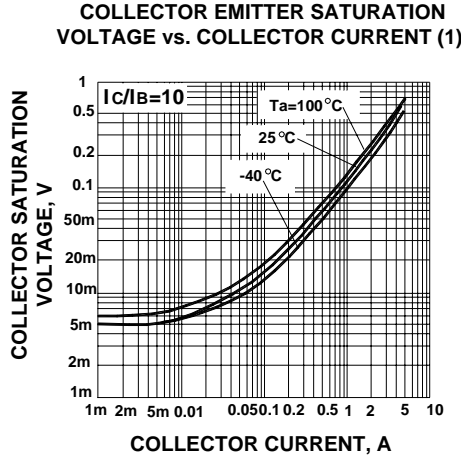
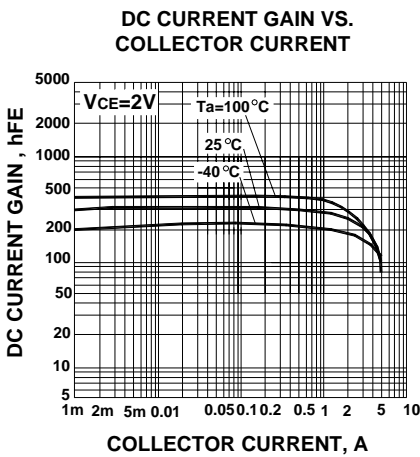
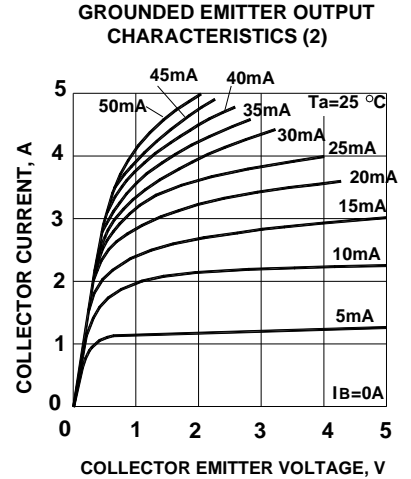
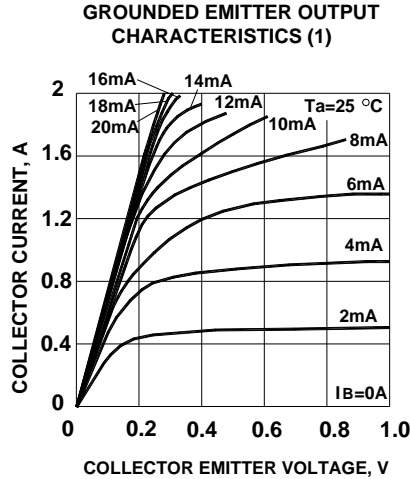
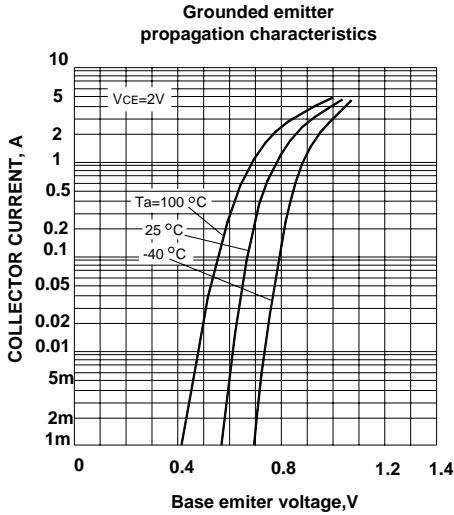


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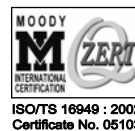
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Dated : 05/04/2003



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ISO/TS 16949 : 2002
Certificate No. 05103

ISO 14001:2004
Certificate No. 7116

ISO 9001:2000
Certificate No. 050698