

ST 2SD965

NPN Silicon Epitaxial Planar Transistor

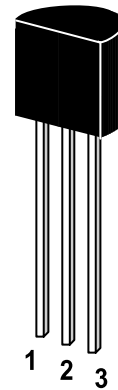
for low-frequency power and stroboscope applications.

The transistor is subdivided into three groups P, Q and R, according to its DC current gain.

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

Features

- Low collector-emitter saturation voltage
- Satisfactory operation performances at high efficiency with the low voltage power supply



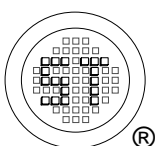
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package

Weight approx. 0.19g

Absolute Maximum Ratings (Ta=25°C)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	7	V
Peak Collector Current	I_{CP}	8	A
Collector Current	I_C	5	A
Power Dissipation	P_{tot}	750	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	-55 to +150	°C



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 71116



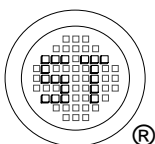
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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=2\text{V}$, $I_C=0.5\text{A}$	P	h_{FE}	120	-	250	-
	Q	h_{FE}	230	-	380	-
	R	h_{FE}	340	-	600	-
		h_{FE}	150	-	-	-
Collector Cutoff Current at $V_{CB}=10\text{V}$		I_{CBO}	-	-	0.1	μA
Collector Cutoff Current at $V_{CE}=10\text{V}$		I_{CEO}	-	-	1.0	μA
Emitter Cutoff Current at $V_{EB}=7\text{V}$		I_{EBO}	-	-	0.1	μA
Collector Output Capacitance at $V_{CB}=20\text{V}$, $f=1\text{MHz}$ (Common base, input open circuited)		C_{ob}	-	26	50	pF
Collector to Emitter Voltage at $I_C=1\text{mA}$		V_{CEO}	20	-	-	V
Emitter to Base Voltage at $I_E=10\mu\text{A}$		V_{EBO}	7	-	-	V
Collector to Emitter Saturation Voltage at $I_C=3\text{A}$, $I_B=0.1\text{A}$		$V_{CE(sat)}$	-	0.28	1	V
Current Gain Bandwidth Product at $V_{CB}=6\text{V}$, $I_E=-50\text{mA}$, $f=200\text{MHz}$		f_T	-	150	-	MHz



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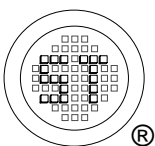
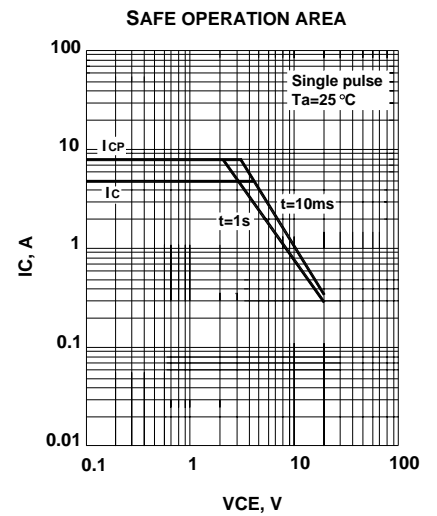
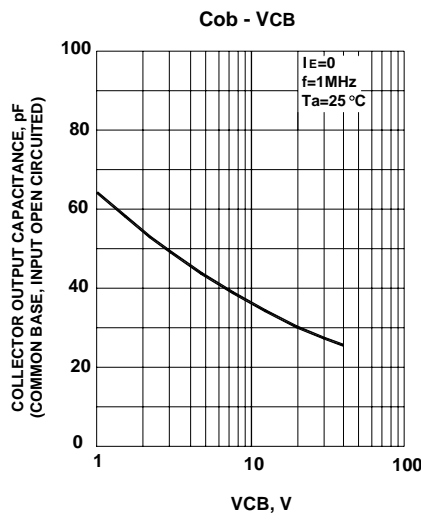
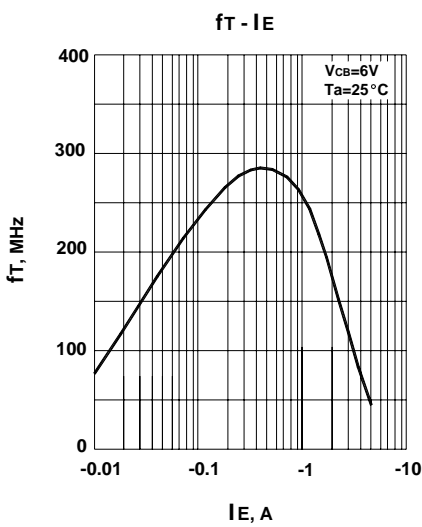
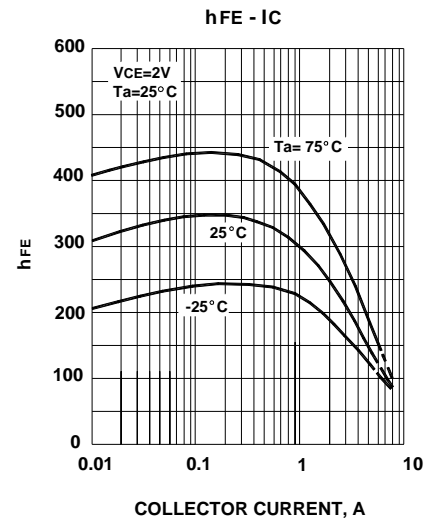
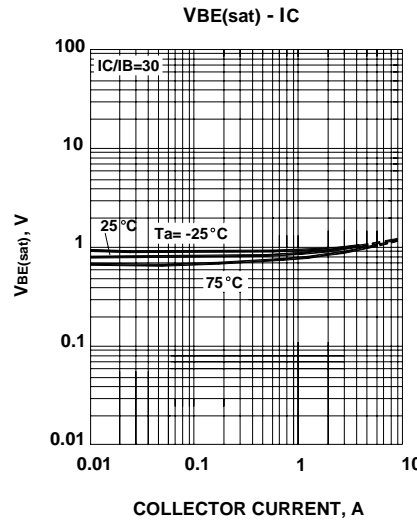
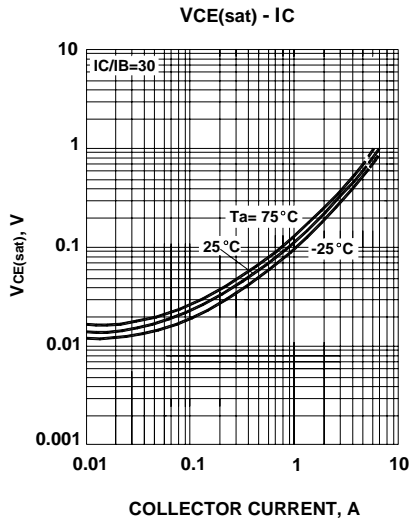
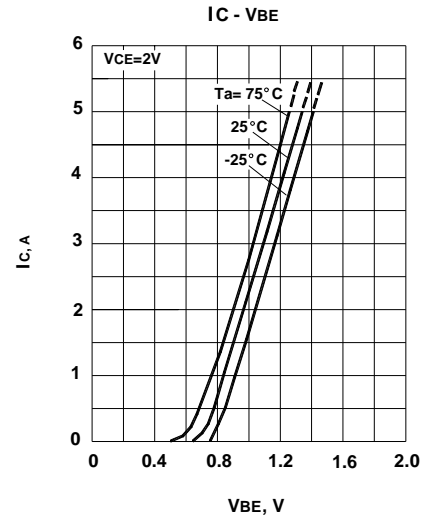
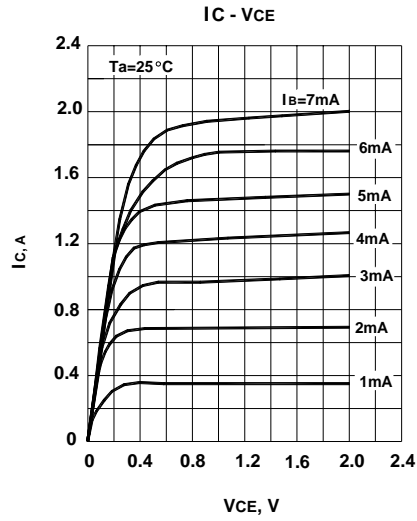
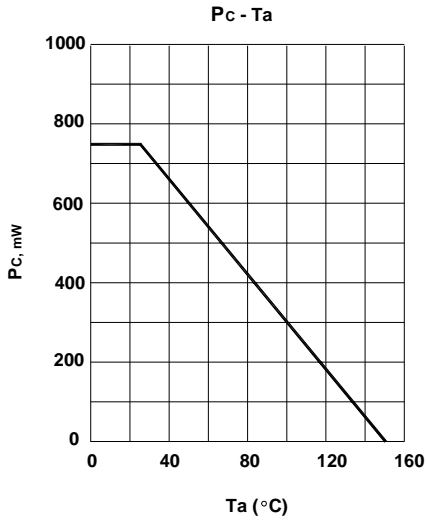
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