



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

ST 2SD965

NPN Silicon Epitaxial Planar Transistor

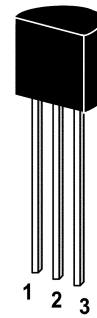
for low-frequency power and stroboscope applications.

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



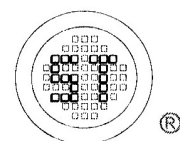
1. Emitter 2. Collector 3. Base

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



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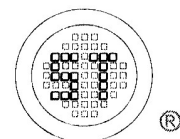
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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

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



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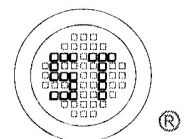
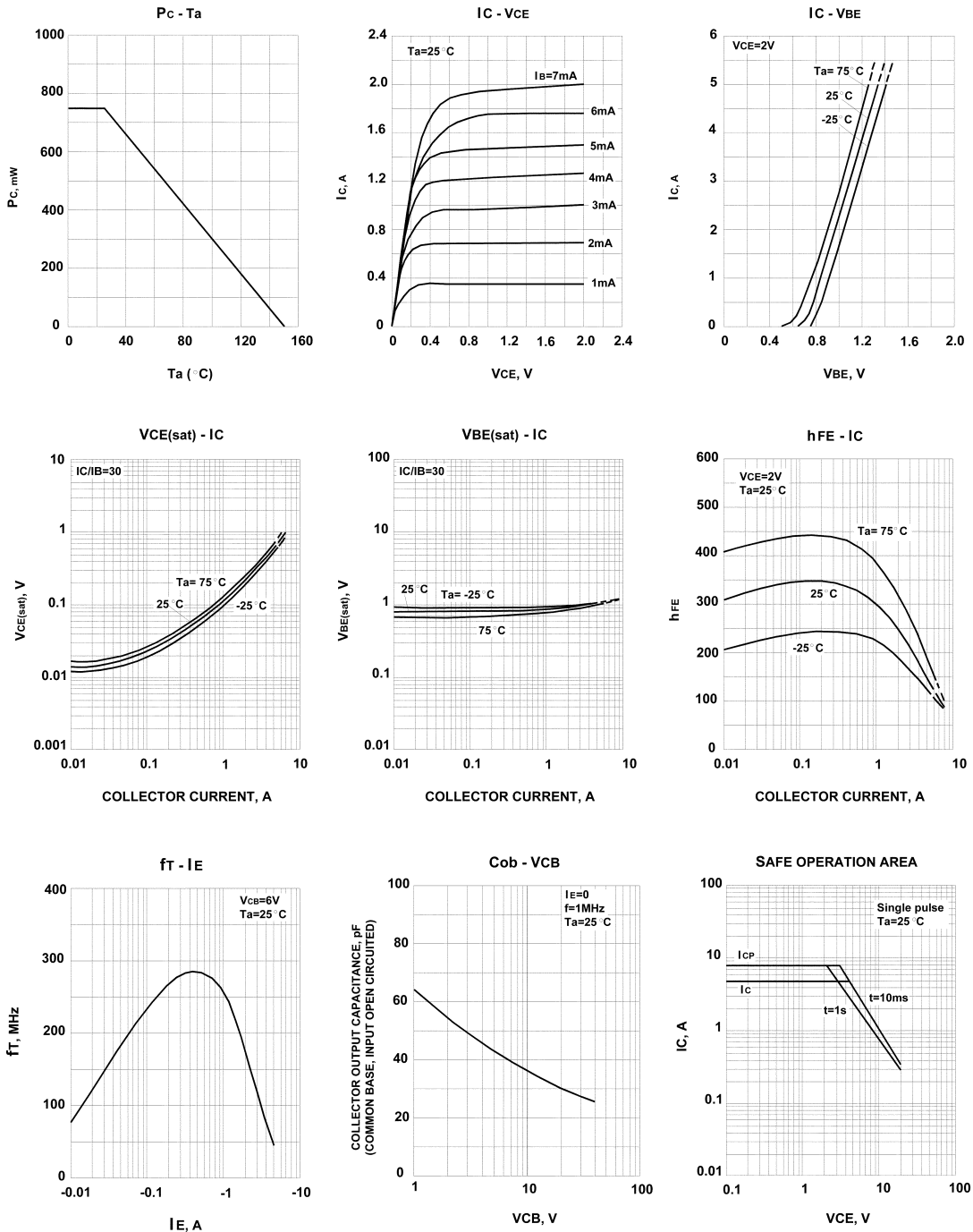
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