



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.

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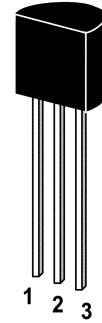
ST 8050 (2A)

NPN Silicon Epitaxial Planar Transistor

for switching and amplifier applications. Especially suitable for AF-driver stages and low power output stages.

The transistor is subdivided into two groups, C and D, according to its DC current gain. As complementary type the PNP transistor ST 8550 is recommended.

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

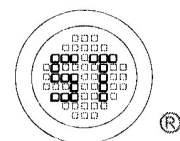


1. Emitter 2. Base 3. Collector

TO-92 Plastic Package
Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Emitter Voltage	V_{CEO}	25	V
Collector Base Voltage	V_{CBO}	40	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1.5	A
Peak Collector Current	I_{CM}	2	A
Base Current	I_B	100	mA
Power Dissipation	P_{tot}	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$



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Dated : 05/01/2005



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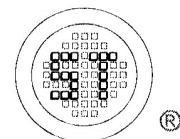
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Characteristics at T_{amb}=25 °C

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at V _{CE} =1V, I _C =5mA	h _{FE}	45	170	-	
at V _{CE} =1V, I _C =100mA	h _{FE}	120	-	200	-
	8050C				
	h _{FE}	160	-	300	-
	8050D				
at V _{CE} =1V, I _C =1.5A	h _{FE}	40	80	-	
Collector Cutoff Current					
at V _{CB} =35V	I _{CBO}	-	-	100	nA
Emitter Cutoff Current					
at V _{BE} =6V	I _{EBO}	-	-	100	nA
Collector Saturation Voltage					
at I _C =1.5A, I _B =100mA	V _{CE(sat)}	-	0.28	0.5	V
Base Saturation Voltage					
at I _C =1.5A, I _B =100mA	V _{BE(sat)}	-	0.98	1.2	V
Collector Emitter Breakdown Voltage					
at I _C =2mA	V _{(BR)CEO}	25	-	-	V
Collector Base Breakdown Voltage					
at I _C =100μA	V _{(BR)CBO}	40	-	-	V
Emitter Base Breakdown Voltage					
at I _E =100μA	V _{(BR)EBO}	6	-	-	V
Base Emitter Voltage					
at I _C =10mA, V _{CE} =1V	V _{BE(on)}	-	0.66	1	V
Gain Bandwidth Product					
at V _{CE} =10V, I _C =50mA	f _T	120	200	-	MHz
Collector Base Capacitance					
at V _{CB} =10V, f=1MHz	C _{OB}	-	15	-	pF



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