



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

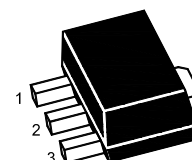
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

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

ST 8050U

NPN Silicon Epitaxial Planar Transistor

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



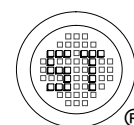
1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CB0}	40	V
Collector Emitter Voltage	V _{CEO}	25	V
Emitter Base Voltage	V _{EBO}	6	V
Collector Current	I _C	1.5	A
Power Dissipation	P _{tot}	625	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _S	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V _{CE} = 1 V, I _C = 5 mA at V _{CE} = 1 V, I _C = 100 mA at V _{CE} = 1 V, I _C = 800 mA	Current Gain Group C D	h _{FE}	45	-	-	-
		h _{FE}	120	-	200	-
		h _{FE}	160	-	300	-
		h _{FE}	40	-	-	-
Collector Base Cutoff Current at V _{CB} = 35 V	I _{CB0}	-	-	100	nA	
Emitter Base Cutoff Current at V _{EB} = 6 V	I _{EBO}	-	-	100	nA	
Collector Base Breakdown Voltage at I _C = 100 μA	V _{(BR)CB0}	40	-	-	V	
Collector Emitter Breakdown Voltage at I _C = 2 mA	V _{(BR)CEO}	25	-	-	V	
Emitter Base Breakdown Voltage at I _E = 100 μA	V _{(BR)EBO}	6	-	-	V	
Collector Emitter Saturation Voltage at I _C = 800 mA, I _B = 80 mA	V _{CE(sat)}	-	-	0.5	V	
Base Emitter Saturation Voltage at I _C = 800 mA, I _B = 80 mA	V _{BE(sat)}	-	-	1.2	V	
Base Emitter Voltage at I _C = 10 mA, V _{CE} = 1 V	V _{BE}	-	-	1	V	
Gain Bandwidth Product at V _{CE} = 10 V, I _C = 50 mA	f _T	100	-	-	MHz	
Collector Base Capacitance at V _{CB} = 10 V, f = 1 MHz	C _{OB}	-	9	-	pF	





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