



# FUKUCOM COMPANY LTD.

## 福 靈 有 限 公 司

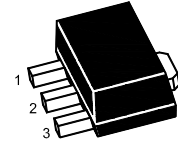
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

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

### ST 8550U

#### PNP Silicon Epitaxial Planar Transistor

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



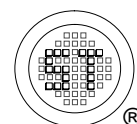
1.Base 2.Collector 3.Emitter  
SOT-89 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	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	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 55 to + 150	$^\circ\text{C}$

#### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 1\text{ V}$ , $-I_C = 5\text{ mA}$ at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$ at $-V_{CE} = 1\text{ V}$ , $-I_C = 800\text{ mA}$	Current Gain Group C D	$h_{FE}$	45	-	-	-
		$h_{FE}$	120	-	200	-
		$h_{FE}$	160	-	300	-
		$h_{FE}$	40	-	-	-
Collector Base Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CBO}$	-	-	100	nA	
Emitter Base Cutoff Current at $-V_{BE} = 6\text{ V}$	$-I_{EBO}$	-	-	100	nA	
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	40	-	-	V	
Collector Emitter Breakdown Voltage at $-I_C = 2\text{ mA}$	$-V_{(BR)CEO}$	25	-	-	V	
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V	
Collector Emitter Saturation Voltage at $-I_C = 800\text{ mA}$ , $-I_B = 80\text{ mA}$	$-V_{CE(sat)}$	-	-	0.5	V	
Base Emitter Saturation Voltage at $-I_C = 800\text{ mA}$ , $-I_B = 80\text{ mA}$	$-V_{BE(sat)}$	-	-	1.2	V	
Base Emitter Voltage at $-I_C = 10\text{ mA}$ , $-V_{CE} = 1\text{ V}$	$-V_{BE}$	-	-	1	V	
Gain Bandwidth Product at $-V_{CE} = 10\text{ V}$ , $-I_C = 50\text{ mA}$	$f_T$	120	-	-	MHz	
Collector Base Capacitance at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	15	-	pF	



Dated : 20/02/2009



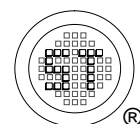
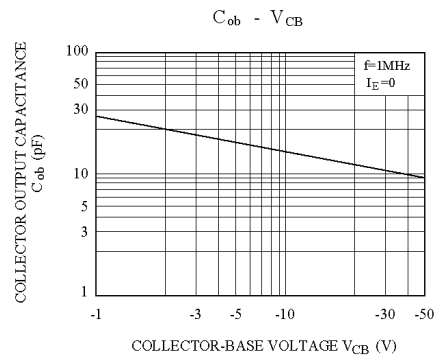
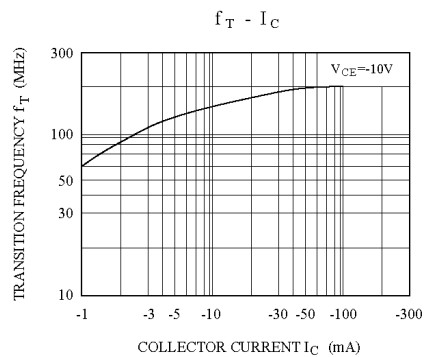
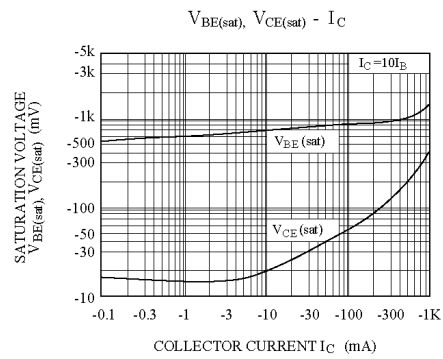
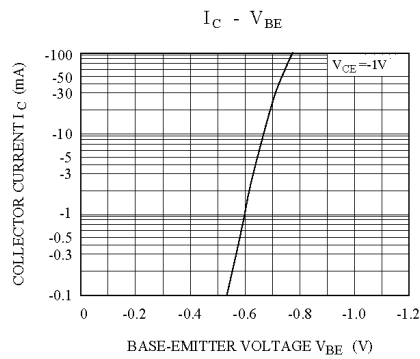
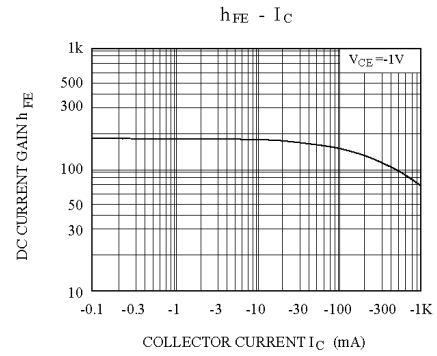
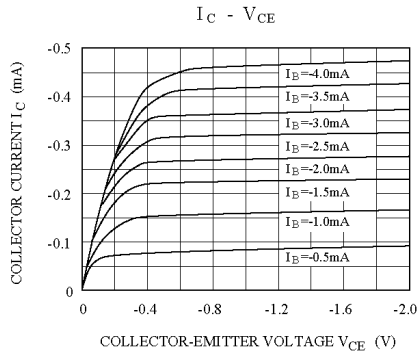
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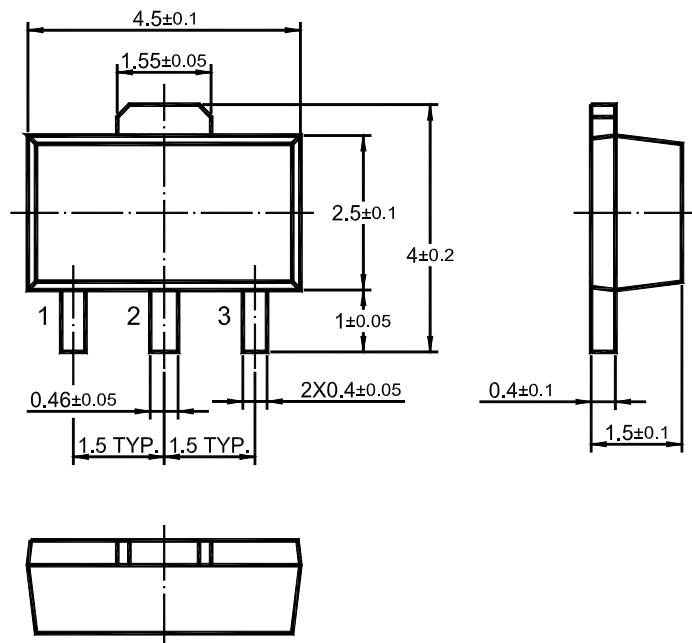
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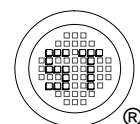
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**SOT-89 PACKAGE OUTLINE**



Dimensions in mm



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