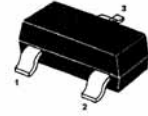


**FUKUCOM COMPANY LTD.****福 靈 有 限 公 司**FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

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

S8050LT1**NPN Epitaxial Silicon Transistor**

- Complement to S8550LT1
- Collector Current: $I_C=500\text{mA}$
- High Total Poer Dissipation: $P_c=225\text{mW}$

1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package**Absolute Maximum Ratings** $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Characteristic	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EB}	Emitter-Base Voltage	6	V
I_C	Collector Current	500	mA
P_D	Collector Dissipation $T_a=25^\circ\text{C}$ *	225	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55~150	$^\circ\text{C}$

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Characteristic	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\ \mu\text{A}$, $I_E=0$	40			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=1\text{mA}$, $I_B=0$	25			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=100\ \mu\text{A}$, $I_C=0$	6			V
I_{CBO}	Collector-Base Cutoff Current	$V_{CB}=35\text{V}$, $I_E=0\text{V}$			100	$\eta\ \text{A}$
I_{EBO}	Emitter-Base Cutoff Current	$V_{EB}=6\text{V}$, $I_C=0$			100	$\eta\ \text{A}$
h_{FE}	DC Current Gain Group C Group D	$V_{CE}=1\text{V}$, $I_C=50\text{mA}$	120 180		200 300	
h_{FE}	DC Current Gain	$V_{CE}=1\text{V}$, $I_C=5\text{mA}$ $V_{CE}=1\text{V}$, $I_C=500\text{mA}$	45 30			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=500\text{mA}$, $I_B=50\text{mA}$			0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=500\text{mA}$, $I_B=50\text{mA}$			1.2	V
$V_{BE(ON)}$	Base-Emitter On Voltage	$V_{CE}=1\text{V}$; $I_C=10\text{mA}$			1.0	V
C_{OB}	Output Capacitance	$V_{CB}=10\text{V}$; $I_E=0$ $f=\text{MHz}$		9		pf
f_T	Current Gain-Bandwidth Product	$V_{CE}=10\text{V}$, $I_C=50\text{mA}$	100	190		MHz

Marking : A6(Group)

* Total Device Dissipation : $FR=1 \times 0.75 \times 0.062$ in Board, Derate 25°C # Pulse Test : Pulse Width $\leq 300\ \mu\text{s}$, Duty cycle $\leq 2\%$



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S8050LT1

