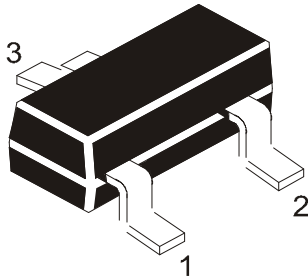


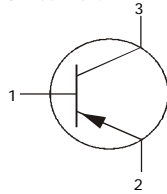
**PNP SILICON PLANAR EPITAXIAL TRANSISTOR**

**CMBT8550**



PIN CONFIGURATION (PNP)

- 1 = BASE
- 2 = EMITTER
- 3 = COLLECTOR



**SOT-23  
Formed SMD Package**

**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	$V_{CBO}$	30	V
Collector Emitter Voltage	$V_{CEO}$	25	V
Emitter Base Voltage	$V_{EBO}$	6	V
Collector Current Continuous	$I_C$	800	mA
Collector Dissipation @ $T_a=25^\circ\text{C}$	$P_C$	250	mW
Operating and Storage Junction Temperature Range	$T_j, T_{stg}$	- 55 to +125	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$  unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNITS
Collector Base Voltage	$V_{CBO}$	$I_C=100\mu\text{A}, I_E=0$	30			V
Collector Emitter Voltage	$V_{CEO}$	$I_C=10\text{mA}, I_B=0$	25			V
Emitter Base Voltage	$V_{EBO}$	$I_E=10\mu\text{A}, I_C=0$	6			V
Collector Cut off Current	$I_{CBO}$	$V_{CB}=15\text{V}, I_E=0$			50	nA
Emitter Cut off Current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			500	nA
DC Current Gain	$h_{FE}$	$I_C=5\text{mA}, V_{CE}=1\text{V}$ * $I_C=100\text{mA}, V_{CE}=1\text{V}$ $I_C=500\text{mA}, V_{CE}=1\text{V}$	45 100 40		400	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			1.2	V
Transition Frequency	$f_T$	$I_C=100\text{mA}, V_{CE}=10\text{V}, f=100\text{MHz}$	100			MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}, f=1\text{MHz}$			35	pF

CLASSIFICATIONS	CMBT8550	C	D	E
* $h_{FE}$	100 - 400	100 - 200	150 - 300	280 - 400
MARKING	55	55C	55D	55E



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