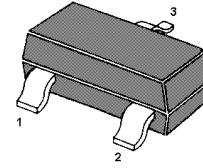


# MMBT8550 (2A)

## PNP 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.



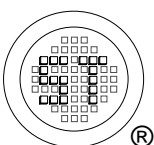
1.BASE 2.EMITTER 3.COLLECTOR  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	40	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	25	V
Emitter Base Voltage	$-V_{\text{EBO}}$	6	V
Collector Current	$-I_{\text{C}}$	2	A
Power Dissipation	$P_{\text{tot}}$	350	mW
Junction Temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{Stg}}$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{\text{CE}} = 1 \text{ V}$ , $-I_{\text{C}} = 5 \text{ mA}$ at $-V_{\text{CE}} = 1 \text{ V}$ , $-I_{\text{C}} = 100 \text{ mA}$ at $-V_{\text{CE}} = 1 \text{ V}$ , $-I_{\text{C}} = 1.5 \text{ A}$	$h_{\text{FE}}$	45	-	-
	MMBT8550C $h_{\text{FE}}$	100	250	-
	MMBT8550D $h_{\text{FE}}$	160	300	-
	$h_{\text{FE}}$	40	-	-
Collector Base Cutoff Current at $-V_{\text{CB}} = 35 \text{ V}$	$-I_{\text{CBO}}$	-	100	nA
Emitter Base Cutoff Current at $-V_{\text{EB}} = 6 \text{ V}$	$-I_{\text{EBO}}$	-	100	nA
Collector Base Breakdown Voltage at $-I_{\text{C}} = 100 \mu\text{A}$	$-V_{(\text{BR})\text{CBO}}$	40	-	V
Collector Emitter Breakdown Voltage at $-I_{\text{C}} = 2 \text{ mA}$	$-V_{(\text{BR})\text{CEO}}$	25	-	V
Emitter Base Breakdown Voltage at $-I_{\text{E}} = 100 \mu\text{A}$	$-V_{(\text{BR})\text{EBO}}$	6	-	V
Collector Emitter Saturation Voltage at $-I_{\text{C}} = 1.5 \text{ A}$ , $-I_{\text{B}} = 100 \text{ mA}$	$-V_{\text{CE}(\text{sat})}$	-	0.5	V
Base Emitter Saturation Voltage at $-I_{\text{C}} = 1.5 \text{ A}$ , $-I_{\text{B}} = 100 \text{ mA}$	$-V_{\text{BE}(\text{sat})}$	-	1.2	V
Base Emitter Voltage at $-V_{\text{CE}} = 1 \text{ V}$ , $-I_{\text{C}} = 10 \text{ mA}$	$-V_{\text{BE}(\text{on})}$	-	1	V
Transition Frequency at $-V_{\text{CE}} = 10 \text{ V}$ , $-I_{\text{C}} = 50 \text{ mA}$	$f_{\text{T}}$	100	-	MHz



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