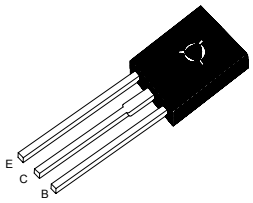
ST 2SB1151T

PNP Epitaxial Silicon Power Transistor



TO-126 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	60	V
Emitter Base Voltage	$-V_{EBO}$	7	V
Collector Current (DC)	$-I_C$	5	A
Collector Current (PW = 10 ms)	$-I_{CP}$	8	A
Base Current	$-I_B$	1	A
Collector Power Dissipation (at T_a = 25 °C)	P_C	1.3	W
Collector Power Dissipation (at T_c = 25 °C)	P_C	20	W
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Max.	Unit
DC Current Gain					
at $-V_{CE}$ = 1 V, $-I_C$ = 0.1 A		h_{FE}	60	-	-
at $-V_{CE}$ = 1 V, $-I_C$ = 2 A	Current Gain Group O	h_{FE}	100	200	-
	Y	h_{FE}	160	320	-
	G	h_{FE}	200	400	-
at $-V_{CE}$ = 2 V, $-I_C$ = 5 A		h_{FE}	50	-	-
Collector Base Cutoff Current at $-V_{CB}$ = 50 V		$-I_{CBO}$	-	10	µA
Emitter Base Cutoff Current at $-V_{EB}$ = 7 V		$-I_{EBO}$	-	10	µA
Collector Emitter Saturation Voltage at $-I_C$ = 2 A, $-I_B$ = 0.2 A		$-V_{CE(sat)}$	-	0.3	V
Base Emitter Saturation Voltage at $-I_C$ = 2 A, $-I_B$ = 0.2 A		$-V_{BE(sat)}$	-	1.2	V
Turn On Time at $-V_{CC}$ = 10 V, $-I_C$ = 2 A, $-I_{B1}$ = I_{B2} = 0.2 A, R_L = 5 Ω		t_{on}	-	1	µs
Storage Time at $-V_{CC}$ = 10 V, $-I_C$ = 2 A, $-I_{B1}$ = I_{B2} = 0.2 A, R_L = 5 Ω		t_{stg}	-	2.5	µs
Fall Time at $-V_{CC}$ = 10 V, $-I_C$ = 2 A, $-I_{B1}$ = I_{B2} = 0.2 A, R_L = 5 Ω		t_f	-	1	µs