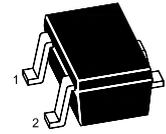


# MMBTA92W

## PNP Silicon Epitaxial Planar Transistor

for high voltage switching and amplifier applications



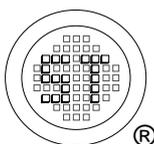
1.Base 2.Emitter 3.Collector  
SOT-323 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	300	V
Collector Emitter Voltage	$-V_{CEO}$	300	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Total Power Dissipation	$P_{tot}$	200	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.	Max.	Unit
DC Current Gain at $-V_{CE} = 10\text{ V}$ , $-I_C = 1\text{ mA}$	$h_{FE}$	25	-	-
at $-V_{CE} = 10\text{ V}$ , $-I_C = 10\text{ mA}$	$h_{FE}$	40	-	-
at $-V_{CE} = 10\text{ V}$ , $-I_C = 30\text{ mA}$	$h_{FE}$	25	-	-
Collector Base Cutoff Current at $-V_{CB} = 200\text{ V}$	$-I_{CBO}$	-	250	nA
Emitter Base Cutoff Current at $-V_{EB} = 3\text{ V}$	$-I_{EBO}$	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	300	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	300	-	V
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 20\text{ mA}$ , $-I_B = 2\text{ mA}$	$-V_{CE(sat)}$	-	0.5	V
Base Emitter Saturation Voltage at $-I_C = 20\text{ mA}$ , $-I_B = 2\text{ mA}$	$-V_{BE(sat)}$	-	0.9	V
Transition Frequency at $-V_{CE} = 20\text{ V}$ , $-I_C = 10\text{ mA}$ , $f = 100\text{ MHz}$	$f_T$	50	-	MHz
Collector Output Capacitance at $-V_{CB} = 20\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	6	pF



**SEMTECH ELECTRONICS LTD.**  
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