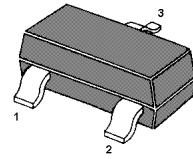


MMBTA92 / MMBTA93

PNP Silicon High Voltage Transistors

for high voltage switching and amplifier applications.



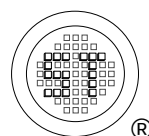
1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	MMBTA92 MMBTA93 $-V_{\text{CBO}}$	300 200	V
Collector Emitter Voltage	MMBTA92 MMBTA93 $-V_{\text{CEO}}$	300 200	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	500	mA
Total Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $-V_{\text{CE}} = 10\text{ V}$, $-I_{\text{C}} = 1\text{ mA}$	h_{FE}	25	-	-
at $-V_{\text{CE}} = 10\text{ V}$, $-I_{\text{C}} = 10\text{ mA}$	h_{FE}	80	200	-
at $-V_{\text{CE}} = 10\text{ V}$, $-I_{\text{C}} = 30\text{ mA}$	h_{FE}	25	-	-
Collector Base Cutoff Current				
at $-V_{\text{CB}} = 200\text{ V}$	MMBTA92 $-I_{\text{CBO}}$	-	0.25	μA
at $-V_{\text{CB}} = 160\text{ V}$	MMBTA93 $-I_{\text{CBO}}$	-	0.25	μA
Emitter Base Cutoff Current				
at $-V_{\text{EB}} = 3\text{ V}$	$-I_{\text{EBO}}$	-	0.1	μA
Collector Base Breakdown Voltage				
at $-I_{\text{C}} = 100\text{ }\mu\text{A}$	MMBTA92 MMBTA93 $-V_{(\text{BR})\text{CBO}}$	300 200	- -	V
Collector Emitter Breakdown Voltage				
at $-I_{\text{C}} = 1\text{ mA}$	MMBTA92 MMBTA93 $-V_{(\text{BR})\text{CEO}}$	300 200	- -	V
Emitter Base Breakdown Voltage				
at $-I_{\text{E}} = 100\text{ }\mu\text{A}$	$-V_{(\text{BR})\text{EBO}}$	5	-	V
Collector Emitter Saturation Voltage				
at $-I_{\text{C}} = 20\text{ mA}$, $-I_{\text{B}} = 2\text{ mA}$	$-V_{\text{CE(sat)}}$	-	0.5	V
Base Emitter Saturation Voltage				
at $-I_{\text{C}} = 20\text{ mA}$, $-I_{\text{B}} = 2\text{ mA}$	$-V_{\text{BE(sat)}}$	-	0.9	V
Current Gain Bandwidth Product				
at $-V_{\text{CE}} = 20\text{ V}$, $-I_{\text{C}} = 10\text{ mA}$, $f = 100\text{ MHz}$	f_{T}	50	-	MHz
Collector Base Capacitance				
at $-V_{\text{CB}} = 20\text{ V}$, $f = 1\text{ MHz}$	MMBTA92 MMBTA93 C_{cb}	- -	6 8	pF



MMBTA92 / MMBTA93

