

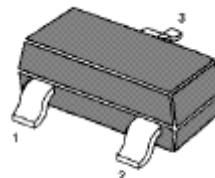
# Kingtronics®

## MMBTA92 THRU MMBTA93

PNP Silicon High Voltage Transistors

### FEATURES

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	300	V
	MMBTA93	200	
Collector Emitter Voltage	MMBTA92	300	V
	MMBTA93	200	
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	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	$^\circ\text{C}$

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

PARAMETER	SYMBOL	Min.	Max.	UNIT
DC Current Gain	at $-V_{CE} = 10\text{ V}$ , $-I_C = 1\text{ mA}$	$h_{FE}$	25	-
	at $-V_{CE} = 10\text{ V}$ , $-I_C = 10\text{ mA}$	$h_{FE}$	80	200
	at $-V_{CE} = 10\text{ V}$ , $-I_C = 30\text{ mA}$	$h_{FE}$	25	-
Collector Base Cutoff Current	at $-V_{CB} = 200\text{ V}$ MMBTA92	$-I_{CBO}$	-	0.25
	at $-V_{CB} = 160\text{ V}$ MMBTA93	$-I_{CBO}$	-	0.25
Emitter Base Cutoff Current at $-V_{EB} = 3\text{ V}$	$-I_{EBO}$	-	0.1	$\mu\text{A}$
Collector Base Breakdown Voltage at $-I_C = 100\ \mu\text{A}$	MMBTA92	$-V_{(BR)CBO}$	300	-
	MMBTA93	$-V_{(BR)CBO}$	200	-
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	MMBTA92	$-V_{(BR)CEO}$	300	-
	MMBTA93	$-V_{(BR)CEO}$	200	-
Emitter Base Breakdown Voltage at $-I_E = 100\ \mu\text{A}$	$-V_{(BR)EBO}$	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
Current Gain Bandwidth Product at $-V_{CE} = 20\text{ V}$ , $-I_C = 10\text{ mA}$ , $f = 100\text{ MHz}$	$f_T$	50	-	MHz
Collector Base Capacitance at $-V_{CB} = 20\text{ V}$ , $f = 1\text{ MHz}$	MMBTA92	$C_{cb}$	-	6
	MMBTA93	$C_{cb}$	-	8

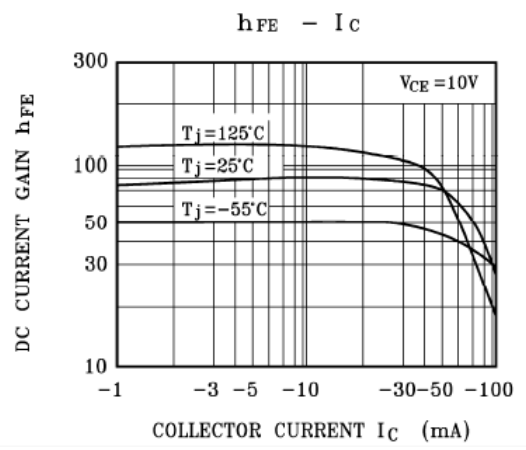
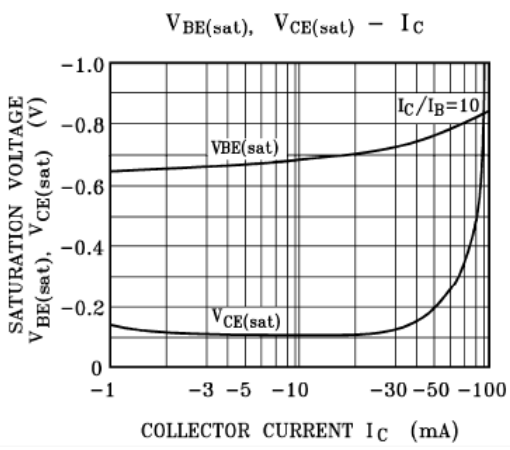
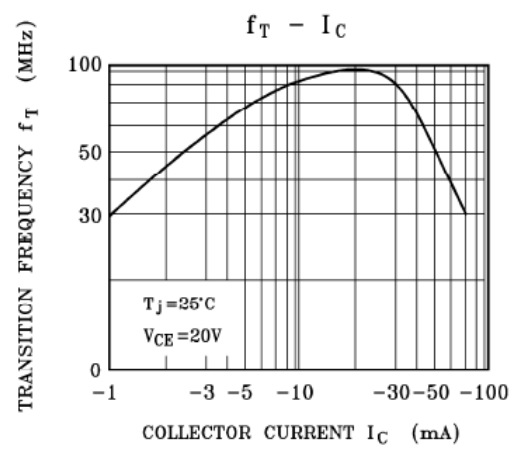
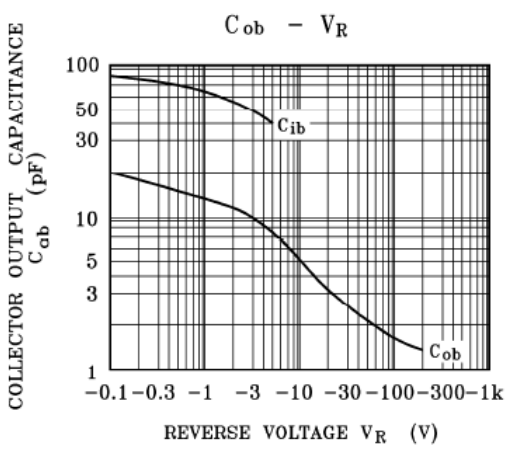
**Kingtronics® International Company**

Website: [www.kingtronics.com](http://www.kingtronics.com) Email: [info@kingtronics.com](mailto:info@kingtronics.com) Tel: (852) 8106 7033 Fax: (852) 8106 7099



# MMBTA92 THRU MMBTA93

PNP Silicon High Voltage Transistors



Note: Specifications are subject to change without notice

**Kingtronics® International Company**

Website: [www.kingtronics.com](http://www.kingtronics.com) Email: [info@kingtronics.com](mailto:info@kingtronics.com) Tel: (852) 8106 7033 Fax: (852) 8106 7099