

# SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

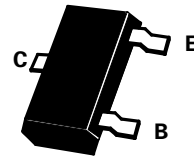
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## FMMTA92

PARTMARKING DETAILS: - FMMTA92 - 4E  
- FMMTA92R - 8E

COMPLEMENTARY TYPES: - FMMTA92 - FMMTA42



SOT23

### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FMMTA92	UNIT
Collector-Base Voltage	$V_{CBO}$	-300	V
Collector-Emitter Voltage	$V_{CEO}$	-300	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Continuous Collector Current	$I_C$	-200	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ ).

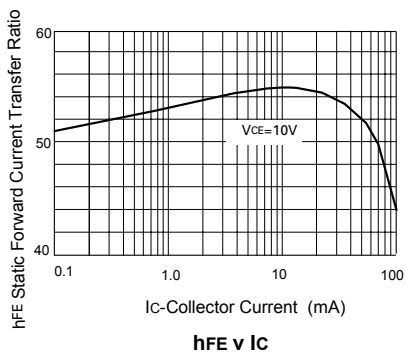
PARAMETER	SYMBOL	FMMTA92		UNIT	CONDITIONS.
		MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-300		V	$I_C = -100\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300		V	$I_C = -1\text{mA}, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut-Off Current	$I_{CBO}$		-0.25	$\mu\text{A}$	$V_{CB} = -200\text{V}, I_E = 0$ $V_{CB} = -160\text{V}, I_E = 0$
Emitter Cut-Off Current	$I_{EBO}$		-0.1	$\mu\text{A}$	$V_{EB} = -3\text{V}, I_E = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.5	V	$I_C = -20\text{mA}, I_B = -2\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	V	$I_C = -20\text{mA}, I_B = -2\text{mA}^*$
Static Forward Current Transfer Ratio	$h_{FE}$	25 40 25			$I_C = -1\text{mA}, V_{CE} = 10\text{V}^*$ $I_C = -10\text{mA}, V_{CE} = 10\text{V}^*$ $I_C = -30\text{mA}, V_{CE} = -10\text{V}^*$
Transition Frequency	$f_T$	50		MHz	$I_C = -10\text{mA}, V_{CE} = -20\text{V}$ $f = 20\text{MHz}$
Output Capacitance	$C_{obo}$		6	pF	$V_{CB} = -20\text{V}, f = 1\text{MHz}$

\*Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$

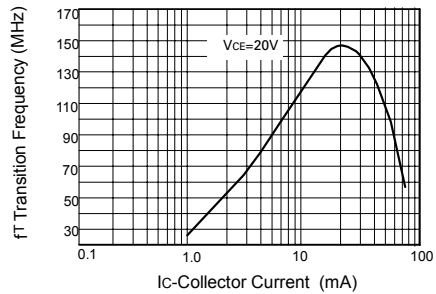


# FMMTA92

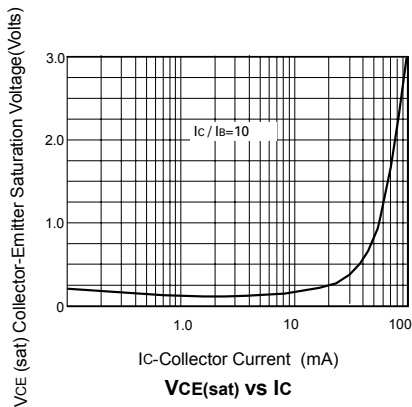
## TYPICAL CHARACTERISTICS



**hFE v  $I_C$**



**$f_T$  vs  $I_C$**



**$V_{CE(sat)}$  vs  $I_C$**