

SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

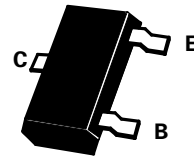
ISSUE 4 - MARCH 2001



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 $T_{amb} = 25^\circ\text{C}$).

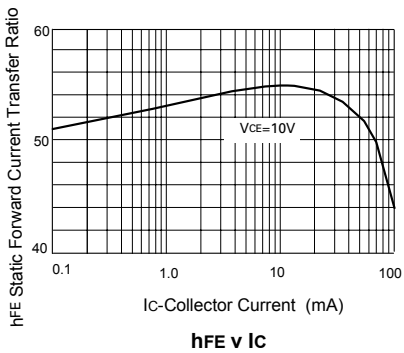
PARAMETER	SYMBOL	FMMTA92		UNIT	CONDITIONS.
		MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-300		V	$I_C = -100\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300		V	$I_C = -1\text{mA}, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut-Off Current	I_{CBO}		-0.25	μA	$V_{CB} = -200\text{V}, I_E = 0$ $V_{CB} = -160\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}		-0.1	μA	$V_{EB} = -3\text{V}, I_E = 0$
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 μs . Duty cycle $\leq 2\%$

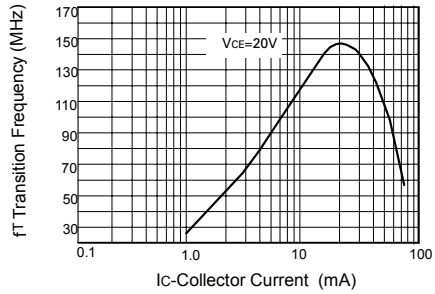


FMMTA92

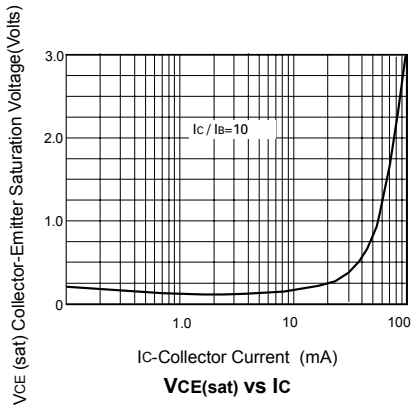
TYPICAL CHARACTERISTICS



hFE v IC



fT vs IC



VCE(sat) vs IC