

SOT23 NPN SILICON PLANAR MEDIUM POWER TRANSISTORS

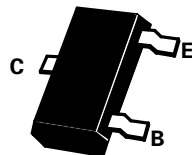
FMMTA05 FMMTA06

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FEATURES

- * 80 Volt V_{CE0}
- * Gain of 50 at $I_C=100\text{mA}$

PARTMARKING DETAIL – FMMTA05 – 1H
FMMTA06 – 1G
FMMTA05R – NA
FMMTA06R – MA



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FMMTA05	FMMTA06	UNIT
Collector-Base Voltage	V_{CBO}	60	80	V
Collector-Emitter Voltage	V_{CEO}	60	80	V
Emitter-Base Voltage	V_{EBO}	4		V
Continuous Collector Current	I_C	500		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	FMMTA05		FMMTA06		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Emitter Breakdown Voltage	$V_{(BR)EBO}$	60		80		V	$I_C=1\text{mA}^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4		4		V	$I_E=100\mu\text{A}$
Collector Cut-Off Current	I_{CES}		0.1		0.1	μA	$V_{CES}=60\text{V}$
Collector Cut-Off Current	I_{CBO}		0.1		0.1	μA μA	$V_{CB}=60\text{V}$ $V_{CB}=80\text{V}$
Static Forward Current Transfer Ratio	h_{FE}	50 50		50 50			$I_C=10\text{mA}, V_{CE}=1\text{V}^*$ $I_C=100\text{mA}, V_{CE}=1\text{V}^*$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.25		0.25	V	$I_C=100\text{mA}, I_B=10\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		1.2		1.2	V	$I_C=100\text{mA}, V_{CE}=1\text{V}^*$
Transition Frequency	f_T	100		100		MHz	$I_C=10\text{mA}, V_{CE}=2\text{V}$ $f=100\text{MHz}$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
Spice parameter data is available upon request for this device