SOT23 NPN SILICON PLANAR MEDIUM POWER TRANSISTORS

FMMTA05
FMMTA06

ISSUE 4 – JUNE 1996

FEATURES
* 80 Volt V_{CEO}
* Gain of 50 at I_C=100mA

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°C	P_{tot}	330		mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150		°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

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

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

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FMMTA05TA FMMTA05TC