

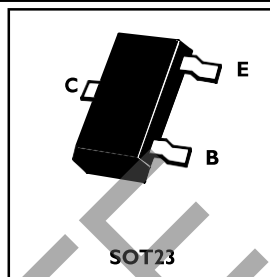
SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

FMMTA56

ISSUE 5 – JUNE 2021



FEATURES

* Gain of 50 at $I_C=100\text{mA}$ PARTMARKING DETAIL - FMMTA56 - 2G
FMMTA56R - MB

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FMMTA56	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-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	FMMTA56		UNIT	CONDITIONS.
		MIN.	MAX.		
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-80		V	$I_C=-1\text{mA}$, $I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-4		V	$I_E=-100\mu\text{A}$, $I_C=0$
Collector-Emitter Cut-Off Current	I_{CES}		-0.1	μA	$V_{CE}=-60\text{V}$
Collector-Base Cut-Off Current	I_{CBO}		-0.1	μA	$V_{CB}=-80\text{V}$, $I_E=0$ $V_{CB}=-60\text{V}$, $I_E=0$
Static Forward Current Transfer Ratio	h_{FE}	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	V	$I_C=-100\text{mA}$, $I_B=-10\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-1.2	V	$I_C=-100\text{mA}$, $V_{CE}=-1\text{V}^*$
Transition Frequency	f_T	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 $\leq 2\%$