SOT23 NPN SILICON PLANAR
HIGH VOLTAGE TRANSISTOR
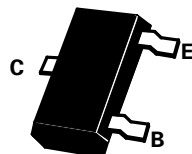
FMMT6517

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FEATURES

* 350 Volt V_{CEO}
* Gain of 15 at I_C=100mA

APPLICATIONS

* SUITABLE FOR AMPLIFIER AND SWITCHING PRODUCTS

COMPLEMENTARY TYPE -   FMMT6520
PARTMARKING DETAIL -   517

SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	350	V
Collector-Emitter Voltage	V_{CEO}	350	V
Emitter-Base Voltage	V_{EBO}	5	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 unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Breakdown Voltages	$V_{(BR)CBO}$	350		V	I_C=100µA, I_E=0
	$V_{(BR)CEO}$	350		V	I_C=1mA, I_B=0*
	$V_{(BR)EBO}$	5		V	I_E=10µA, I_C=0
Cut-Off Currents	I_{CBO}		50	nA	V_{CB}=250V, I_E=0
	I_{EBO}		50	nA	V_{EB}=5V, I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.3 0.35 0.5 1.0	V V V V	I_C=10mA, I_B=1mA* I_C=20mA, I_B=2mA* I_C=30mA, I_B=3mA* I_C=50mA, I_B=5mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		0.80 0.85 0.90	V V V	I_C=10mA, I_B=1mA* I_C=20mA, I_B=2mA* I_C=30mA, I_B=3mA*
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		2.0	V	I_C=100mA, V_{CE}=10V*
Static Forward Current Transfer Ratio	h_{FE}	20 30 30 20 15	 200 200 		I_C=1mA, V_{CE}=10V I_C=10mA, V_{CE}=10V* I_C=30mA, V_{CE}=10V* I_C=50mA, V_{CE}=10V* I_C=100mA, V_{CE}=10V*
Output Capacitance	C_{obo}		6	pF	V_{CB}=20V, f=1MHz
Transition Frequency	f_T	50		MHz	I_C=10mA, V_{CE}=20V, f=20MHz

*Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤2%