

SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

FMMT6520

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FEATURES

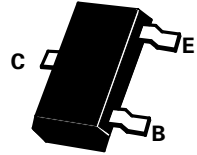
- * 350 Volt V_{CE0}
- * Gain of 15 at $I_C = -100\text{mA}$

APPLICATIONS

- * SUITABLE FOR AMPLIFIER AND SWITCHING PRODUCTS

COMPLEMENTARY TYPE FMMT6517

PARTMARKING DETAIL – 520



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 $T_{amb} = 25^\circ\text{C}$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Breakdown Voltages	$V_{(BR)CBO}$	-350		V	$I_C = -100\mu\text{A}$, $I_E = 0$
	$V_{(BR)CEO}$	-350		V	$I_C = -1\text{mA}$, $I_B = 0^*$
	$V_{(BR)EBO}$	-5		V	$I_E = -10\mu\text{A}$, $I_C = 0$
Cut-Off Currents	I_{CBO}		-50	nA	$V_{CB} = -250\text{V}$, $I_E = 0$
	I_{EBO}		-50	nA	$V_{EB} = -3\text{V}$, $I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.3	V	$I_C = -10\text{mA}$, $I_B = -1\text{mA}^*$
			-0.35	V	$I_C = -20\text{mA}$, $I_B = -2\text{mA}^*$
			-0.5	V	$I_C = -30\text{mA}$, $I_B = -3\text{mA}^*$
			-1.0	V	$I_C = -50\text{mA}$, $I_B = -5\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.75	V	$I_C = -10\text{mA}$, $I_B = -1\text{mA}^*$
			-0.85	V	$I_C = -20\text{mA}$, $I_B = -2\text{mA}^*$
			-0.90	V	$I_C = -30\text{mA}$, $I_B = -3\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-2.0	V	$I_C = -100\text{mA}$, $V_{CE} = -10\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	20			$I_C = -1\text{mA}$, $V_{CE} = -10\text{V}$
		30			$I_C = -10\text{mA}$, $V_{CE} = -10\text{V}^*$
		30	200		$I_C = -30\text{mA}$, $V_{CE} = -10\text{V}^*$
		20	200		$I_C = -50\text{mA}$, $V_{CE} = -10\text{V}^*$
		15			$I_C = -100\text{mA}$, $V_{CE} = -10\text{V}^*$
Output Capacitance	C_{obo}		6	pF	$V_{CB} = 20\text{V}$, $f = 1\text{MHz}$
Transition Frequency	f_T	50		MHz	$I_C = -10\text{mA}$, $V_{CE} = -20\text{V}$, $f = 20\text{MHz}$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$