



SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

FMMT591

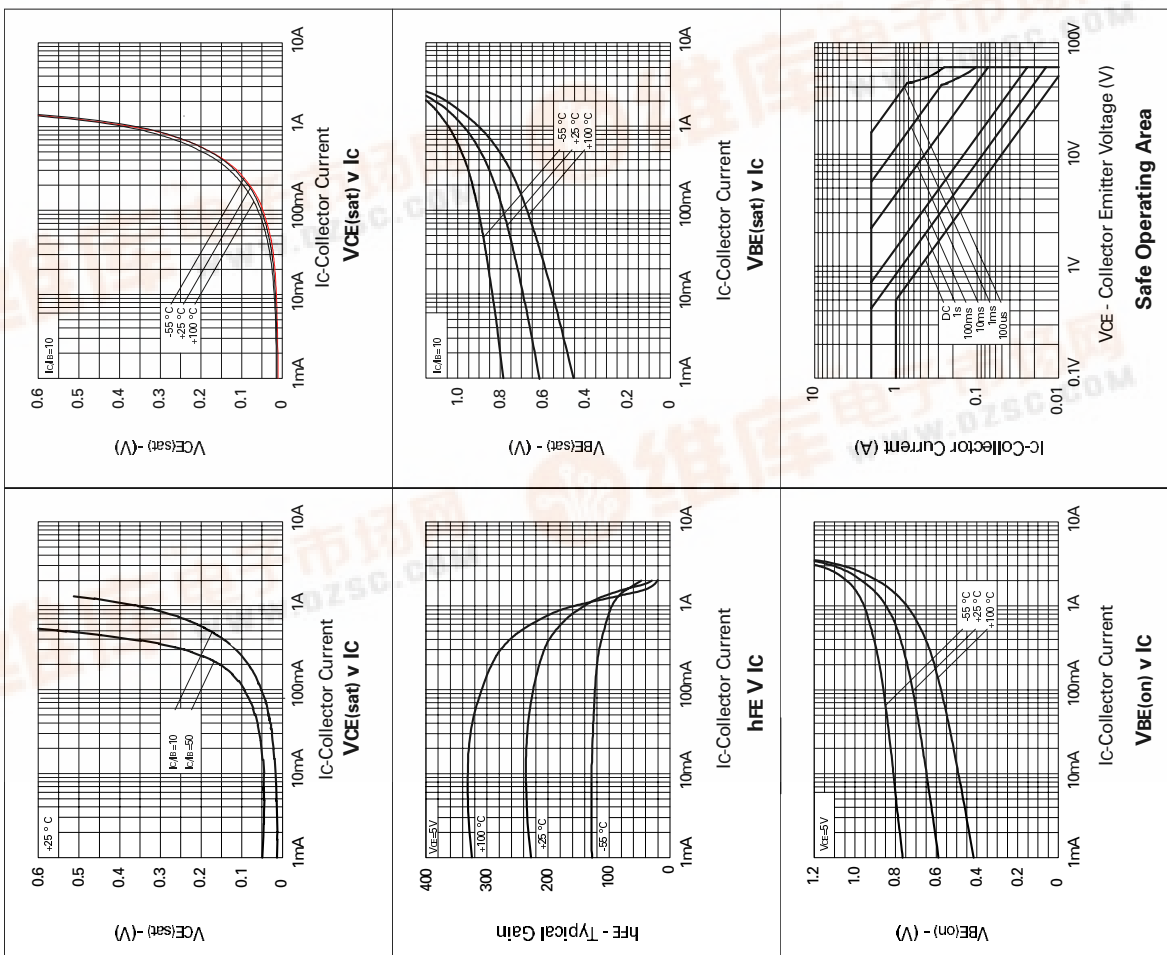
ISSUE 3 - OCTOBER 1995

FEATURES

* Low Equivalent on resistance $R_{CE(sat)}=355m\Omega$ at 1A*

COMPLEMENTARY TYPE- FMMT491
PARTMARKING DETAIL - 591

TYPICAL CHARACTERISTICS



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-2	A
Continuous Collector Current	I_C	-1	A
Base Current	I_B	-200	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	500	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	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80		V	$I_C=-100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60		V	$I_C=-10\text{mA}, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E=-100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB}=-60V$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB}=-4V, I_C=0$
Collector-Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CES}=-60V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-0.3		V	$I_C=-500\text{mA}, I_B=-50\text{mA}^*$
		-0.6		V	$I_C=-1A, I_B=-100\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.2	V	$I_C=-1A, I_B=-100\text{mA}^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C=-1A, V_{CE}=-5V^*$
Static Forward Current Transfer Ratio	h_{FE}	100	300		$I_C=-1\text{mA}, V_{CE}=-5V^*$
		100			$I_C=-500\text{mA}, V_{CE}=-5V^*$
		80			$I_C=-1A, V_{CE}=-5V^*$
		15			$I_C=-2A, V_{CE}=-5V^*$
Transition Frequency	f_T	150		MHz	$I_C=-50\text{mA}, V_{CE}=-10V$ $f=100\text{MHz}$
Output Capacitance	C_{obo}		10	pF	$V_{CB}=-10V, f=1\text{MHz}$

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

查询FMMT591供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

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MEDIUM POWER TRANSISTOR**

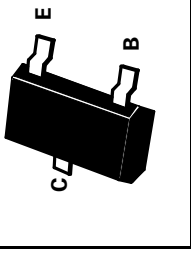
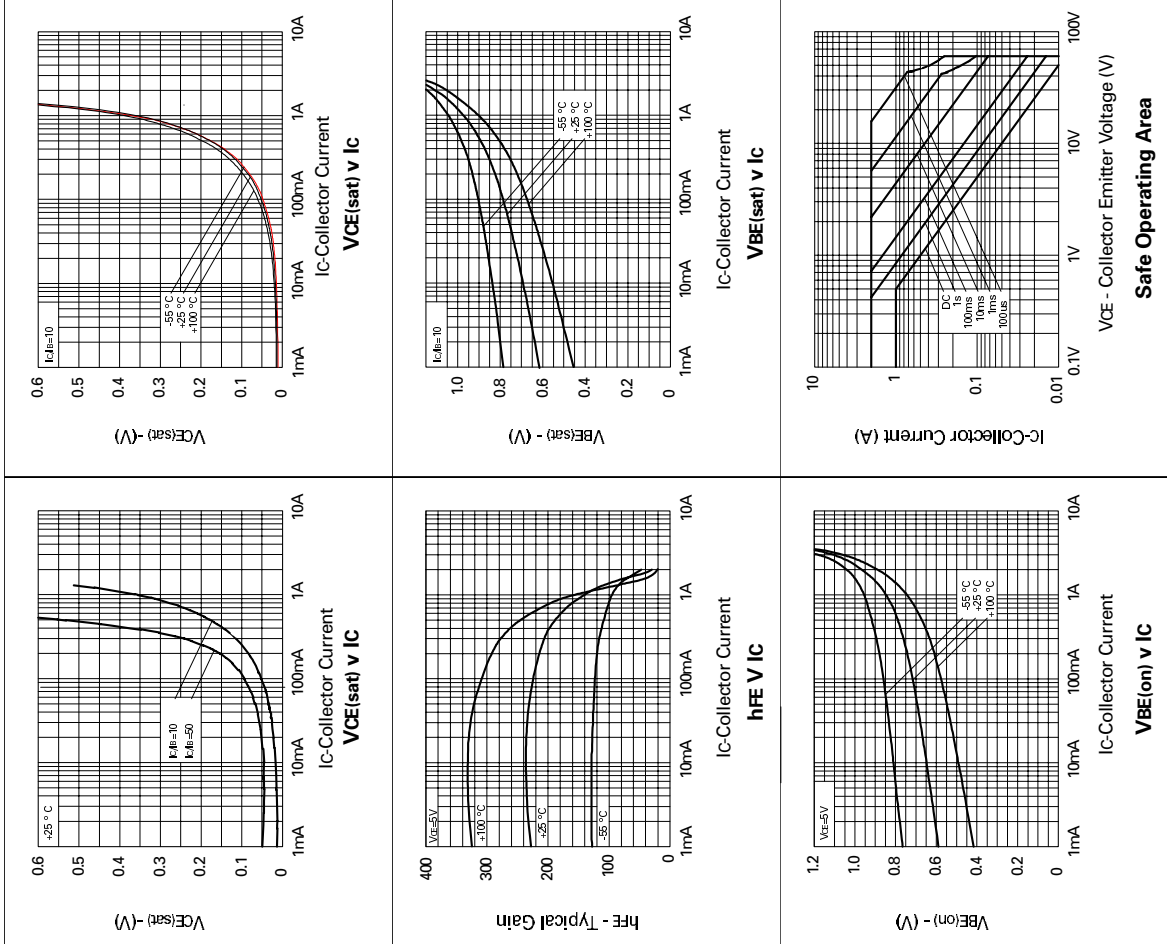
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PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80		V	$I_C = -100\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60		V	$I_C = -10\text{mA}, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB} = -60\text{V}$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -4\text{V}, I_C = 0$
Collector-Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CES} = -60\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-0.3		V	$I_C = -500\text{mA}, I_B = -50\text{mA}^*$
		-0.6		V	$I_C = -1\text{A}, I_B = -100\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.2	V	$I_C = -1\text{A}, I_B = -100\text{mA}^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C = -1\text{A}, V_{CE} = -5\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	100	300		$I_C = -1\text{mA}, V_{CE} = -5\text{V}^*$
		100			$I_C = -500\text{mA}, V_{CE} = -5\text{V}^*$
		80			$I_C = -1\text{A}, V_{CE} = -5\text{V}^*$
		15			$I_C = -2\text{A}, V_{CE} = -5\text{V}^*$
Transition Frequency	f_T	150		MHz	$I_C = -50\text{mA}, V_{CE} = -10\text{V}$ $f = 100\text{MHz}$
Output Capacitance	C_{obo}		10	pF	$V_{CB} = -10\text{V}, f = 1\text{MHz}$

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