



FMMT591A

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 3 - OCTOBER 1995

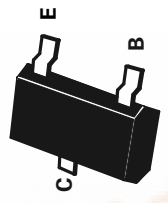
FMMT591A

FEATURES

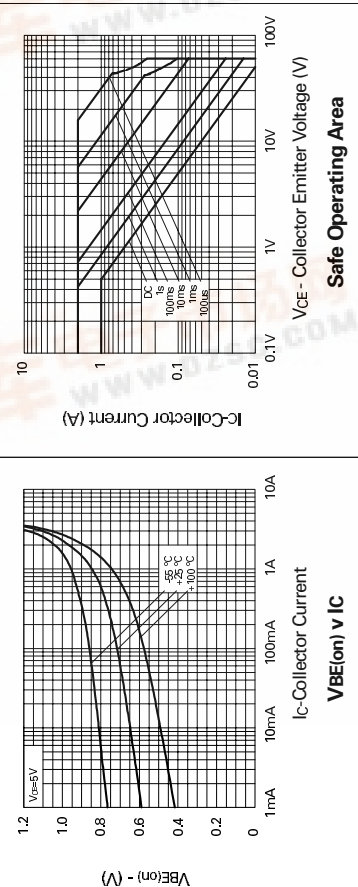
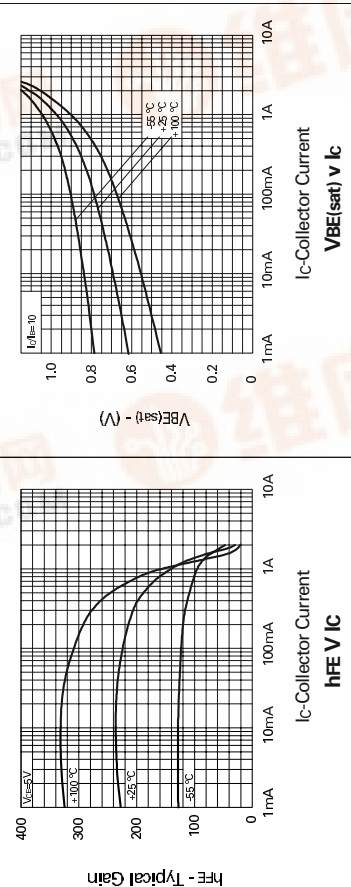
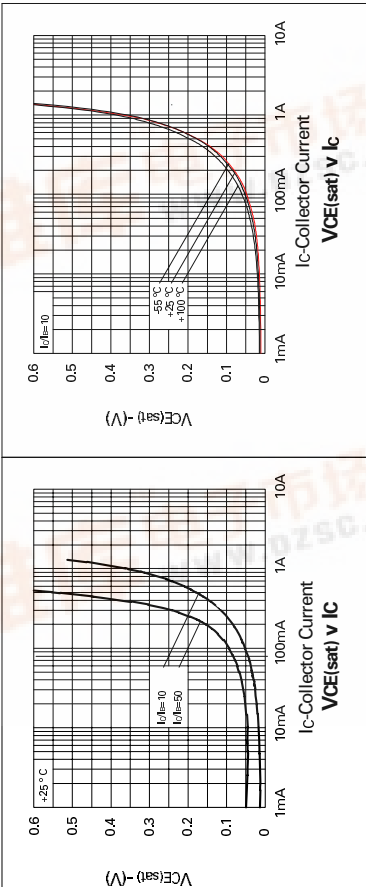
Low equivalent on resistance $R_{CE(sat)} = 350m\Omega$ at 1A

PART MARKING DETAIL - 91A

COMPLEMENTARY TYPE - FMMT491A



TYPICAL CHARACTERISTICS



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	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 $T_{amb}=25^\circ C$	P_{tot}	500	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	$^\circ C$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-40		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-40		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB} = -30V$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -4V$
Collector-Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CES} = -30V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-0.2		V	$I_C = -100mA, I_B = -1mA^*$
		-0.35		V	$I_C = -500mA, I_B = -20mA^*$
		-0.5		V	$I_C = -1A, I_B = -100mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.1	V	$I_C = -1A, I_B = -50mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C = -1A, V_{CE} = -5V^*$
Static Forward Current Transfer Ratio	h_{FE}	300	800		$I_C = -1mA, I_B = -100mA^*$
		300			$I_C = -100mA^*, V_{CE} = -5V$
		250			$I_C = -500mA^*, V_{CE} = -5V$
		160			$I_C = -1A^*, I_B = -100mA^*$
		30			$I_C = -2A^*, I_B = -100mA^*$
Transition Frequency	f_T	150		MHz	$I_C = -50mA, V_{CE} = -10V, f = 100MHz$
Output Capacitance	C_{obo}	10		pF	$V_{CB} = -10V, f = 1MHz$

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

查询FMMT591A供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

**SOT23 PNP SILICON PLANAR
MEDIUM POWER TRANSISTOR**

ISSUE 3 - OCTOBER 1995

FEATURES

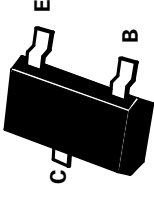
Low equivalent on resistance $R_{CE(sat)} = 350m\Omega$ at 1A

PART MARKING DETAIL - 91A

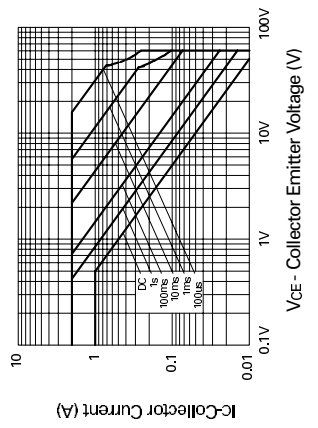
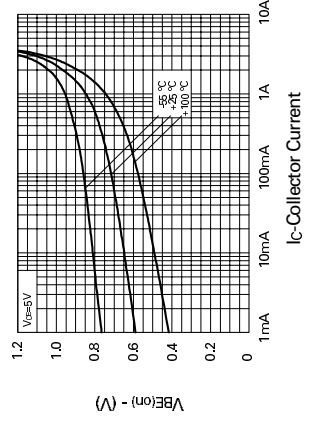
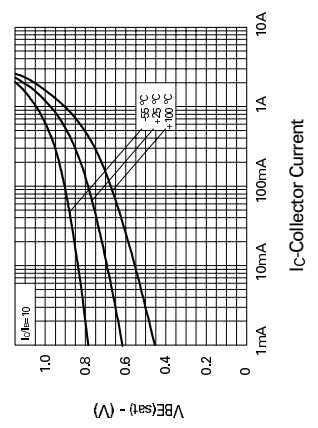
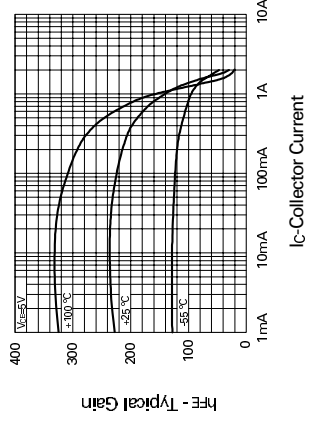
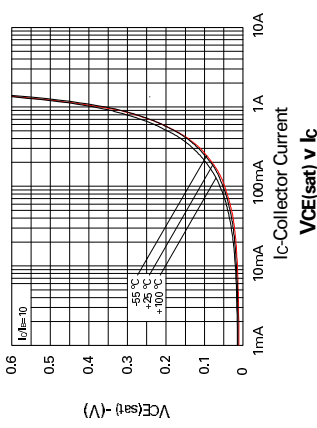
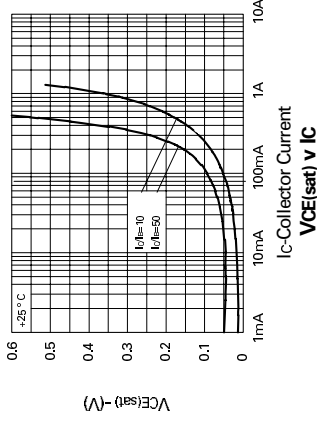
COMPLEMENTARY TYPE - FMMT491A

FMMT591A

FMMT591A



TYPICAL CHARACTERISTICS



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	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	$V_{(BR)CBO}$	-40		V	$I_C = -100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-40		V	$I_C = -10\text{mA}^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu\text{A}$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB} = -30\text{V}$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -4\text{V}$
Collector-Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CES} = -30\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-0.2		V	$I_C = -100\text{mA}, I_B = -1\text{mA}^*$
		-0.35		V	$I_C = -500\text{mA}, I_B = -20\text{mA}^*$
		-0.5		V	$I_C = -1\text{A}, I_B = -100\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.1	V	$I_C = -1\text{A}, I_B = -50\text{mA}^*$
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}	300	800		$I_C = -1\text{mA}, I_B = -100\text{mA}^*$
		300			$I_C = -100\text{mA}^*, I_B = -20\text{mA}^*$
		250			$I_C = -500\text{mA}^*, V_{CE} = -5\text{V}$
		160			$I_C = -1\text{A}^*, I_B = -100\text{mA}^*$
		30			$I_C = -2\text{A}^*, I_B = -100\text{mA}^*$
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=300 μs . Duty cycle $\leq 2\%$
Spice parameter data is available upon request for this device