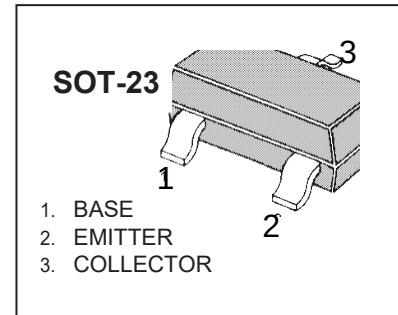


SOT-23 Plastic-Encapsulate Transistors

FMMT593 PNP HIGH VOLTAGE TRANSISTOR

COMPLEMENTARY TYPE FMMT493

MARKING:593



ABSOLUTE MAXIMUM RATINGS.

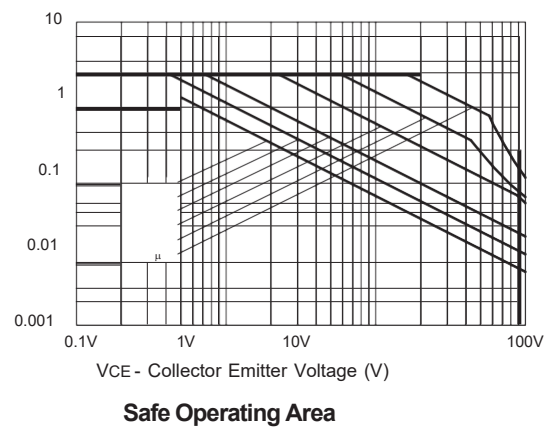
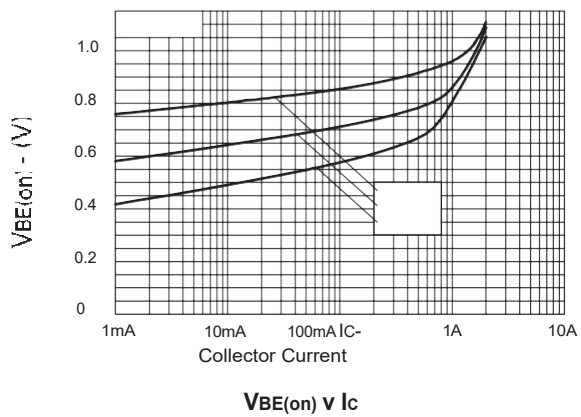
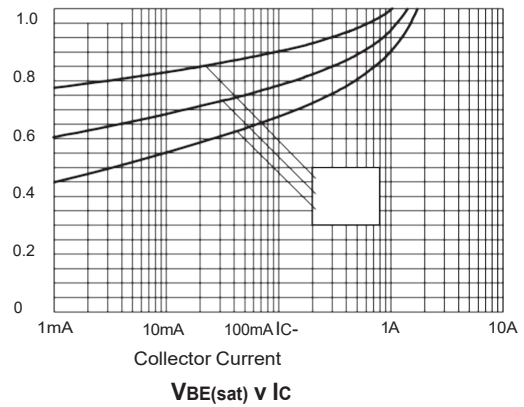
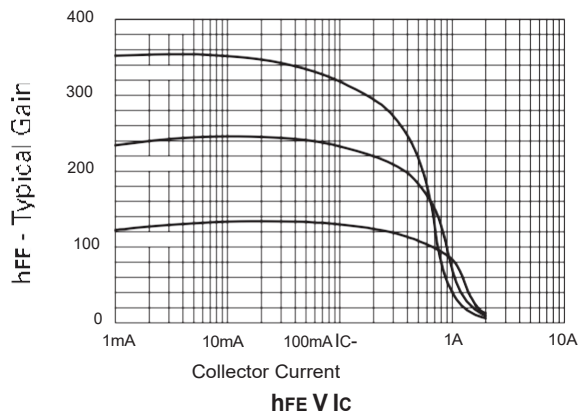
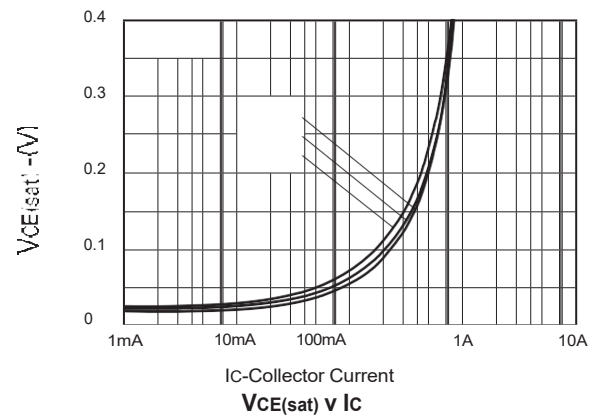
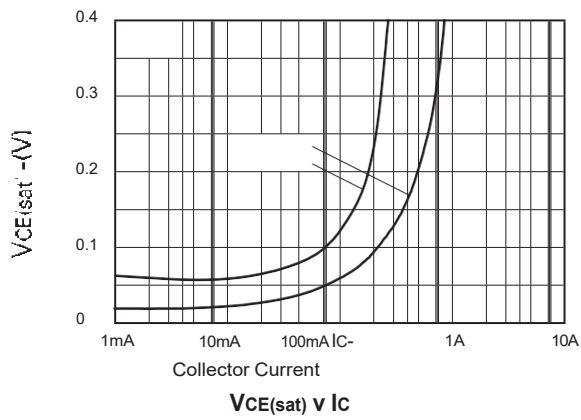
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-2	A
Continuous Collector Current	I_C	-1	A
Base Current	I_B	-200	mA
Power Dissipation at $T_{amb}=25^{\circ}C$ Operating and Storage	P_{tot}	500	mW
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	$V_{(BR)CBO}$	-120		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-100		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	$V_{CB} = -100V$
Emitter Cut-Off Current Collector-Emitter	I_{EBO}		-100	nA	$V_{EB} = -4V$
Cut-Off Current	I_{CES}		-100	nA	$V_{CES} = -100V$
Emitter Saturation Voltages	$V_{CE(sat)}$		-0.2 -0.3	V V	$I_C = -250mA, I_B = -25mA^*$ $I_C = -500mA, I_B = -50mA^*$
	$V_{BE(sat)}$		-1.1	V	$I_C = -500mA, I_B = -50mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C = -1mA, V_{CE} = -5V^*$
Static Forward Current Transfer Rati	h_{FE}	100 100 100 50	300		$I_C = -1mA, V_{CE} = -5V$ $I_C = -250mA, V_{CE} = -5V^*$ $I_C = -500mA, V_{CE} = -5V^*$ $I_C = -1A, V_{CE} = -5V,$
Transition Frequency Output	f_T	50		MHz	$I_C = -50mA, V_{CE} = -10V$ $f = 100MHz$
Capacitance	C_{obo}		5	pF	$V_{CB} = -10V, f = 1MHz$

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

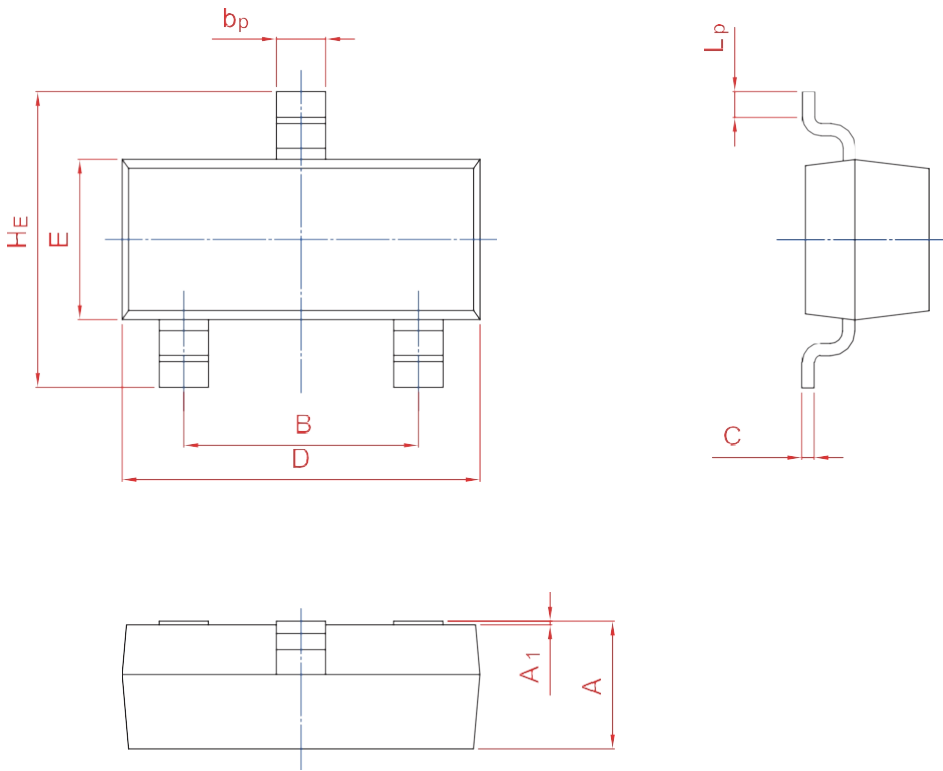
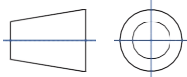
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b_p	C	D	E	H_E	A_1	L_p
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20