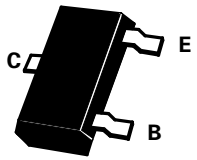
SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 - NOVEMBER 1995 ✪

FMMT593

COMPLEMENTARY TYPE FMMT493
PARTMARKING DETAIL - 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°C	P_{tot}	500	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

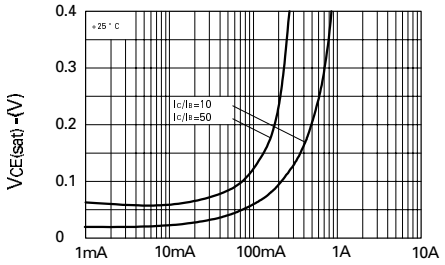
ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-120		V	I_C=-100μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-100		V	I_C=-10mA*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	I_E=-100μA
Collector Cut-Off Current	I_{CBO}		-100	nA	V_{CB}=-100V
Emitter Cut-Off Current	I_{EBO}		-100	nA	V_{EB}=-4V
Collector-Emitter 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 Ratio	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	f_T	50		MHz	I_C=-50mA, V_{CE}=-10V f=100MHz
Output Capacitance	C_{obo}		5	pF	V_{CB}=-10V, f=1MHz

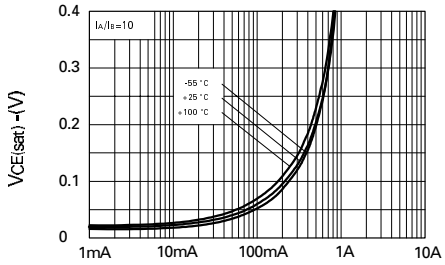
*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%

FMMT593

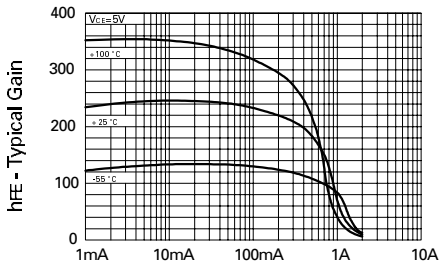
TYPICAL CHARACTERISTICS



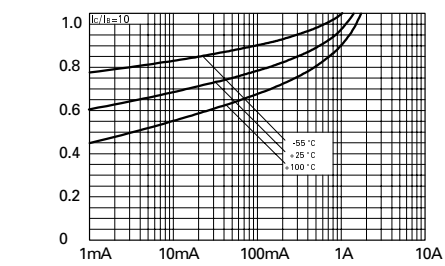
VCE(sat) v IC



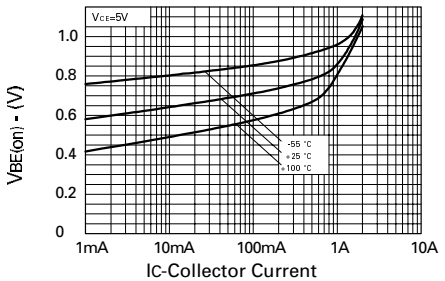
VCE(sat) v IC



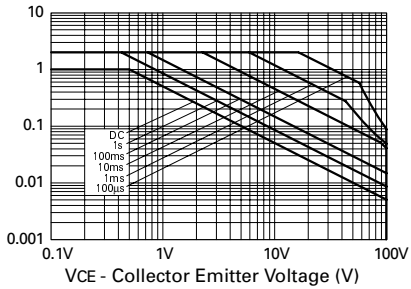
hFE V IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area