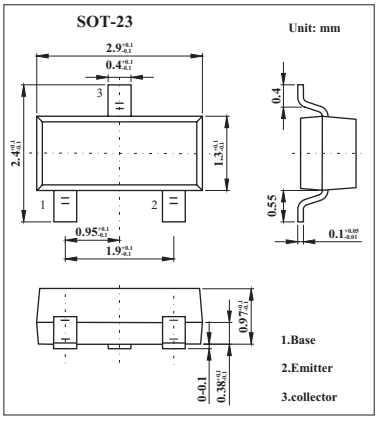
High Voltage Transistor

FMMT593



■ Features

- SOT23 PNP silicon planar

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-120	V
Collector-emitter voltage	V_{CEO}	-100	V
Emitter-base voltage	V_{EBO}	-5	V
Peak collector current	I_{CM}	-2	A
Collector current	I_C	-1	A
Base current	I_B	-200	mA
Power dissipation	P_{tot}	500	mW
Operating and storage temperature range	T_j,T_{stg}	-55 to +150	℃

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA	-120			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	I_C=-10mA	-100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA	-5			V
Collector cutoff current	I_{CBO}	V_{CB}=-100V			-100	nA
Collector-Emitter Cut-Off Current	I_{CES}	V_{CE}=-100V			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V			-100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=-250mA, I_B=-25mA			-0.2	V
		I_C=-500mA, I_B=-50mA			-0.3	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C=-500mA, I_B=-50mA			-1.1	V
Base-emitter voltage *	$V_{BE(ON)}$	I_C=-1mA,V_{CE}=-5V			-1.0	V
Static Forward Current Transfer Ratio	h_{FE}	I_C=-1mA, V_{CE}=-5V	100			
		I_C=-250mA,V_{CE}=-5V*	100			
		I_C=-500mA, V_{CE}=-5V*	100		300	
		I_C=-1A, V_{CE}=-5V,	50			
Current-gain-bandwidth product	f_T	I_C=-50mA,V_{CE}=-10V,f=100MHz	50			MHz
Output capacitance	C_{obo}	V_{CB}=-10V,f=1MHz			5	pF

* Pulse test: tp = 300 μs; d ⩽ 0.02.

■ Marking

Marking	593