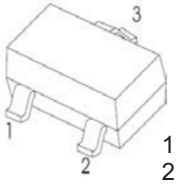
FMMT593

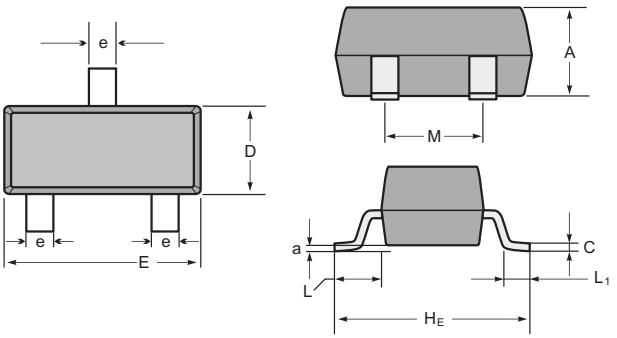
PNP Transistor

Features

- For Switching and AF Amplifier Applications.



1.BASE
2.EMITTER
3.COLLECTOR



SOT-23 mechanical data

UNIT		A	C	D	E	H_E	e	M	L	L_1	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

Absolute Maximum Ratings

Ratings at 25℃ ambient temperature unless otherwise specified.

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
Collector Current	$-I_C$	1	A
Maximum Power Dissipation	P_D	250	mW
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

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Electrical Characteristics (T_A=25℃)

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at V_{CE} = -5 V, I_C = -1 mA at V_{CE} = -5 V, I_C = -250 mA at V_{CE} = -5 V, I_C = -0.5 A at V_{CE} = -5 V, I_C = -1 A	H_{FE}	 100 100 100 50	 -- -- 300 --	--
Collector Base Cutoff Current at V_{CB} = -100V	$-I_{CBO}$	--	0.1	μA
Collector Emitter Cutoff Current at V_{CES} = -100V	$-I_{CES}$	--	0.1	μA
Emitter Base Cutoff Current at V_{EB} = -4 V	$-I_{EBO}$	--	0.1	μA
Collector Base Breakdown Voltage at I_C = -100 μA	$-V_{(BR)CBO}$	120	--	V
Collector Emitter Breakdown Voltage at I_C = -1 mA	$-V_{(BR)CEO}$	100	--	V
Emitter Base Breakdown Voltage at I_E = -100 μA	$-V_{(BR)EBO}$	5	--	V
Collector Emitter Saturation Voltage at I_C = -250 mA, I_B = -25 mA at I_C = -500 mA, I_B = -50 mA	$-V_{CE(sat)}$	 -- --	 0.2 0.3	V
Base Emitter Saturation Voltage at I_C = -500 mA, I_B = -50 mA	$-V_{BE(sat)}$	--	1.1	V
Base Emitter On Voltage at V_{CE} = -5 V, I_C = -1m A	$-V_{BE(on)}$	--	1	V
Transition Frequency at V_{CE} = -10 V, I_C = -50 mA, f = 100 MHz	F_T	150	--	MHz
Collector Output Capacitance at V_{CB} = -10 V, f = 1 MHz	C_{ob}	--	5	pF

RATING AND CHARACTERISTIC CURVES (FMMT593)