FMMT591A SOT23 PNP silicon planar medium power transistor

Features

Low equivalent on resistance $R_{CE(sat)}=350m\Omega$ at 1A Part Marking Detail -91A Complementary type -FMMT491A

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	Α
Continuous Collector current	I _C	-1	Α
Base current	I _B	-200	mA
Power dissipation at Tamb=25oC	P _{tot}	500	mW
Operating an storage temperature range	T _j ; T _{STG}	-55 to +150	°C

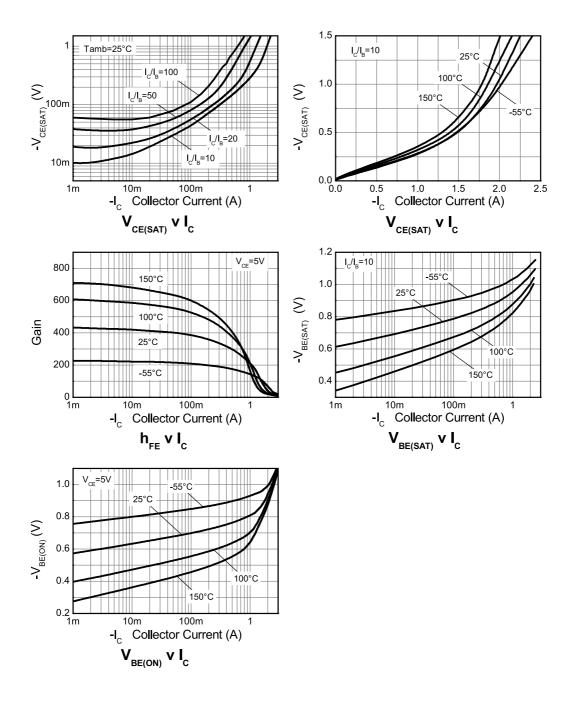
Electrical characteristics (at $T_{amb} = 25$ °C)

Parameter	Symbol	Min	Max	Unit	Conditions
Collector-Base breakdown voltage	V _{(BR)CBO}	-40		V	I _C =-100μA
Collector-Emitter breakdown voltage	V _{(BR)CEO}	-40		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} =-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			I _C =-1mA,
		300	800		I _C =-100mA ^(*)
		250			I _C =-500mA ^(*) , V _{CE} =-5V
		160			I _C =-1A ^(*)
		30			I _C =-2A ^(*)
Transition frequency	f _T	150		MHz	I _C =-50mA, V _{CE} =-10V
					f=100MHz
Output capacitance	C _{obo}		10	рF	V _{CB} =-10V, f=1MHz

NOTES:

(*) Measured under pulse conditions. Pulse width=300 $\mu s.$ Duty cycle 2%

Electrical characteristics



FMMT591A

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 - 1. are intended to implant into the body

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