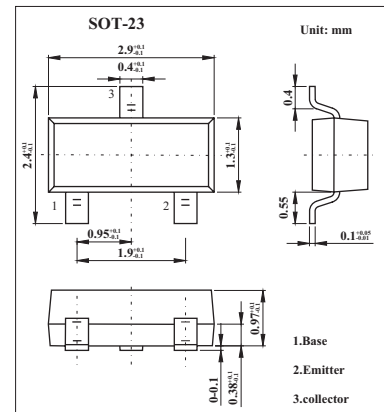


Switching Transistor

FMMT722

■ Features

- 625mW power dissipation.
- I_C CONT 2.5A.
- I_C up to 10A peak pulse current.
- Excellent hfe characteristics up to 10A (pulsed).
- Extremely low saturation voltage e.g. 10mV typ..
- Exhibits extremely low equivalent on-resistance; $R_{CE(sat)}$.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-70	V
Collector-emitter voltage	V_{CEO}	-70	V
Emitter-base voltage	V_{EBO}	-5	V
Peak collector current	I_{CM}	-3	A
Collector current	I_C	-1.5	A
Base current	I_B	-500	mA
Power dissipation	P_{tot}	625	mW
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

FMMT722

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	Ic=-100μA	-70	-150		V
Collector-emitter breakdown voltage *	V(BR)CEO	Ic=-10mA	-70	-125		V
Emitter-base breakdown voltage	V(BR)EBO	Ie=-100μA	-5	-8.8		V
Collector cutoff current	IcBO	Vcb=-60V			-100	nA
Emitter cut-off current	IeBO	VEB=-4V			-100	nA
Collector-emitter saturation voltage *	VCE(sat)	Ic=-0.1A, Ib=-10mA Ic=-0.5A, Ib=-20mA Ic=-1A, Ib=-100mA Ic=-1.5A, Ib=-200mA		-35 -135 -140 -175	-50 -200 -220 -260	mV
Base-emitter saturation voltage *	VBE(sat)	Ic=-1.5A, Ib=-200mA		0.94	-1.05	V
Base-emitter voltage *	VBE(ON)	Ic=-1.5A, VCE=-5V		-0.78	-1.0	V
DC current gain *	hFE	Ic=-10mA, VCE=-5V Ic=-0.1A, VCE=-5V Ic=-1A, VCE=-5V Ic=-1.5A, VCE=-5V	300 300 175 40	470 450 275 60		
Current-gain-bandwidth product	fT	Ic=-50mA, VCE=-10V, f=100MHz	150	200		MHz
Output capacitance	Cobo	Vcb=-10V, f=1MHz		14	20	pF
Turn-on time	t(on)	VCC=-50V, Ic=-0.5A		40		ns
Turn-off time	t(off)	Ib1=-Ib2=-50mA		700		ns

* Pulse test: tp ≤ 300μs; d ≤ 0.02.

■ Marking

Marking	722
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