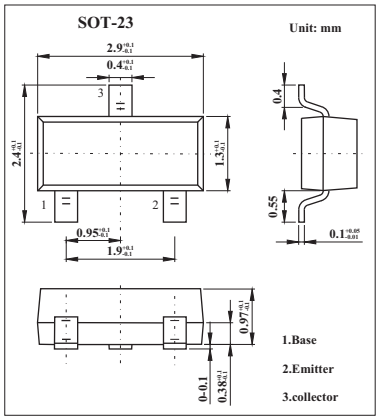
NPN Silicon Power Switching Transistor

FMMT625



Features

Collector current:I_C=1A

Power dissipation :P_C=625mW

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	150	V
Collector-emitter voltage	V_{CEO}	150	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Base current	I_B	0.5	A
Power dissipation	P_C	625	mW
Operating and storage temperature range	T_j,T_{stg}	-55 to +150	℃

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Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA	150			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	I_C=10mA	150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA	5			V
Collector cutoff current	I_{CBO}	V_{CB}=130V			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=4V			100	nA
Collector emitter cutoff current	I_{CES}	V_{CES}=130V			100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=0.1A,I_B=10mA		26	50	mV
		I_C=0.1A,I_B=1mA		110	200	mV
		I_C=1A,I_B=50mA		180	300	mV
Base-Emitter Saturation Voltage *	$V_{BE(sat)}$	I_C=1A, I_B=50mA*		0.85	1.0	V
Base-Emitter Turn-On Voltage *	$V_{BE(on)}$	I_C=1A, V_{CE}=10V*		0.74	1.0	V
DC current gain	h_{FE}	I_C=10mA, V_{CE}=10V*	200	400		
		I_C=200mA,V_{CE}=10V	300	450		
		I_C=1A, V_{CE}=10V*	30	45		
		I_C=3A, V_{CE}=10V*		15		
Output capacitance	C_{ob}	V_{CB}=10V,f=1MHz		6	10	pF
Transition frequecy	f_T	I_C=50mA,V_{CE}=10V,f=100MHz	100	135		MHz

* Pulse test: tp 300 μs; d 0.02.

Marking

Marking	625