

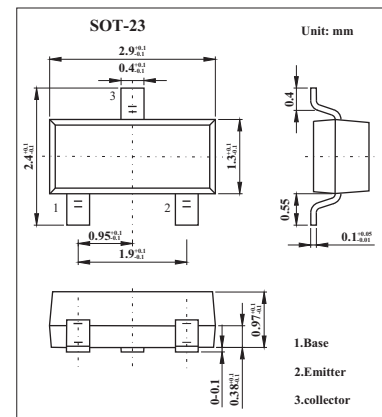
NPN Silicon Power Switching Transistor

FMMT625

Features

Collector current: $I_C=1A$

Power dissipation : $P_C=625mW$



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

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	$^{\circ}C$

NPN Silicon Power Switching Transistor

FMMT625

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100 μ A	150			V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =10mA	150			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100 μ A	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 frequency	f _T	I _C =50mA, V _{CE} =10V, f=100MHz	100	135		MHz

* Pulse test: t_p 300 μs; d 0.02.

Marking

Marking	625
---------	-----