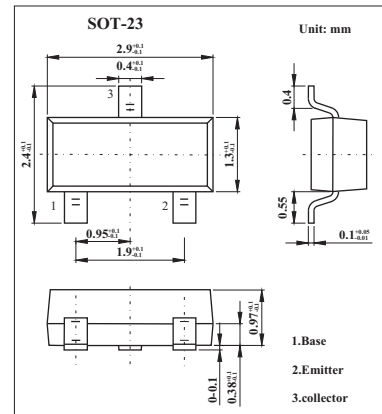


# FMMT624

■ 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	$V_{CBO}$	125	V
Collector-emitter voltage	$V_{CEO}$	125	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	$^{\circ}C$

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100 μ A	125			V
Collector-emitter breakdown voltage *	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA	125			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100 μ A	5			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> =100V			100	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =4V			100	nA
Collector emitter cutoff current	I <sub>CES</sub>	V <sub>CE</sub> =100V			100	nA
Collector-emitter saturation voltage *	V <sub>CE(sat)</sub>	I <sub>C</sub> =0.1A, I <sub>B</sub> =10mA		26	50	mV
		I <sub>C</sub> =0.5A, I <sub>B</sub> =50mA		70	150	
		I <sub>C</sub> =0.5A, I <sub>B</sub> =10mA		160	220	
		I <sub>C</sub> =1A, I <sub>B</sub> =50mA		165	250	
Base-Emitter Saturation Voltage *	V <sub>BE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =50mA*		0.85	1.0	V
Base-Emitter Turn-On Voltage *	V <sub>BE(on)</sub>	I <sub>C</sub> =1A, V <sub>CE</sub> =10V*		0.7	1.0	V
DC current gain	h <sub>FE</sub>	I <sub>C</sub> =10mA, V <sub>CE</sub> =10V*	200	400		
		I <sub>C</sub> =200mA, V <sub>CE</sub> =10V	300	450		
		I <sub>C</sub> =1A, V <sub>CE</sub> =10V*	100	140		
		I <sub>C</sub> =3A, V <sub>CE</sub> =10V*		18		
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, f=1MHz		7	15	pF
Transition frequency	f <sub>T</sub>	I <sub>C</sub> =50mA, V <sub>CE</sub> =10V, f=100MHz	100	155		MHz

\* Pulse test: t<sub>p</sub> ≤ 300 μs; d ≤ 0.02.

■ Marking

Marking	624
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