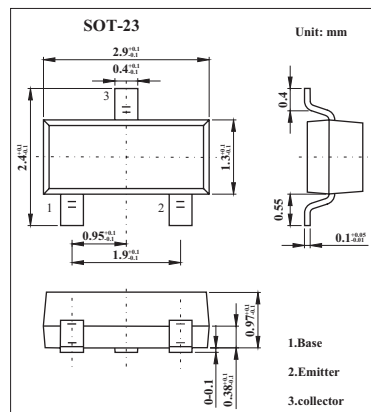


# FMMT4400

## ■ Features

- General purpose transistors.



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	60	V
Collector-emitter voltage	V <sub>CEO</sub>	40	V
Emitter-base voltage	V <sub>EBO</sub>	6	V
Collector current	I <sub>c</sub>	600	mA
Power dissipation	P <sub>tot</sub>	330	mW
Operating and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> =0.1mA	60			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> =1mA	40			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =0.1mA	6			V
Collector-emitter cut-off current	I <sub>CEX</sub>	V <sub>CE</sub> =35V V <sub>EB(off)</sub> =0.4V			0.1	μA
Base cut-off current	I <sub>BEX</sub>	V <sub>CE</sub> =35V V <sub>EB(off)</sub> =3V			0.1	μA
DC current gain *	h <sub>FE</sub>	I <sub>c</sub> =150mA, V <sub>CE</sub> =1V	50		150	
Collector-emitter saturation voltage *	V <sub>CE(sat)</sub>	I <sub>c</sub> =150mA, I <sub>b</sub> =15mA I <sub>c</sub> =500mA, I <sub>b</sub> =50mA			0.4 0.75	V
Base-emitter saturation voltage *	V <sub>BE(sat)</sub>	I <sub>c</sub> =150mA, I <sub>b</sub> =15mA I <sub>c</sub> =500mA, I <sub>b</sub> =50mA	0.75		0.95 1.2	V
Current-gain-bandwidth product	f <sub>T</sub>	I <sub>c</sub> =20mA, V <sub>CE</sub> =10V f=100KHz	200			MHz
Output capacitance	C <sub>obo</sub>	V <sub>CB</sub> =5V, I <sub>E</sub> =0, f=100KHz			6.5	pF
Input capacitance	C <sub>ibo</sub>	V <sub>BE</sub> =0.5V, I <sub>c</sub> =0, f=100KHz			30	pF
Delay time	t <sub>on</sub>	V <sub>CC</sub> =30V, I <sub>c</sub> =150mA, I <sub>b1</sub> =15mA V <sub>BE(off)</sub> =2V			35	ns
Storage time	t <sub>off</sub>	V <sub>CC</sub> =30V, I <sub>c</sub> =150mA I <sub>b1</sub> = I <sub>b2</sub> =15mA			255	ns

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

## ■ Marking

Marking	1KZ
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