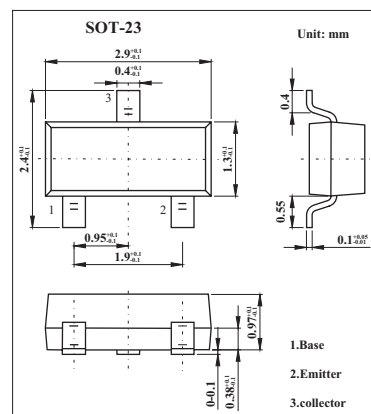


General Purpose Transistors

FMMT4400

■ Features

- General purpose transistors.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	40	V
Emitter-base voltage	V_{EBO}	6	V
Collector current	I_C	600	mA
Power dissipation	P_{tot}	330	mW
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.1\text{mA}$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$	40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.1\text{mA}$	6			V
Collector-emitter cut-off current	I_{CEX}	$V_{CE}=35\text{V}$ $V_{EB(off)}=0.4\text{V}$			0.1	μA
Base cut-off current	I_{BEX}	$V_{CE}=35\text{V}$ $V_{EB(off)}=3\text{V}$			0.1	μA
DC current gain *	h_{FE}	$I_C=150\text{mA}$, $V_{CE}=1\text{V}$	50		150	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C=150\text{mA}$, $I_B=15\text{mA}$ $I_C=500\text{mA}$, $I_B=50\text{mA}$			0.4 0.75	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C=150\text{mA}$, $I_B=15\text{mA}$ $I_C=500\text{mA}$, $I_B=50\text{mA}$	0.75		0.95 1.2	V
Current-gain-bandwidth product	f_T	$I_C=20\text{mA}$, $V_{CE}=10\text{V}$ $f=100\text{KHz}$	200			MHz
Output capacitance	C_{obo}	$V_{CB}=5\text{V}$, $I_E=0$, $f=100\text{KHz}$			6.5	pF
Input capacitance	C_{ibo}	$V_{BE}=0.5\text{V}$, $I_C=0$, $f=100\text{KHz}$			30	pF
Delay time	t_{on}	$V_{CC}=30\text{V}$, $I_C=150\text{mA}$, $I_{B1}=15\text{mA}$ $V_{BE(off)}=2\text{V}$			35	ns
Storage time	t_{off}	$V_{CC}=30\text{V}$, $I_C=150\text{mA}$ $I_{B1}=I_{B2}=15\text{mA}$			255	ns

* Pulse test: $t_p \leq 300 \mu\text{s}$; $d \leq 0.02$.

■ Marking

Marking	1KZ
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