

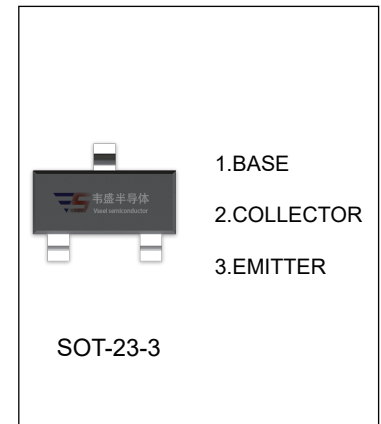
FMMT4124 TRANSISTOR (NPN)

FEATURES

- Switching Application

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	200	mA
P_C	Collector Power Dissipation	330	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	378	$^\circ\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=1\text{mA}, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			50	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=3\text{V}, I_C=0$			50	nA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=1\text{V}, I_C=2\text{mA}$	120		360	
	$h_{FE(2)}^*$	$V_{CE}=1\text{V}, I_C=50\text{mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.95	V
Transition frequency	f_T	$V_{CE}=20\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	300			MHz
Collector output capacitance	C_{ob}	$V_{CB}=5\text{V}, I_E=0, f=140\text{KHz}$			4	pF
Emitter input capacitance	C_{ib}	$V_{BE}=0.5\text{V}, I_E=0, f=140\text{KHz}$			8	pF

*Pulse test