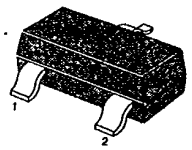
MMBT4124 NPN EPITAXIAL SILICON TRANSISTOR

T-29-19

GENERAL PURPOSE TRANSISTOR

SOT-23



1. Base 2. Emitter 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	200	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	Tstg	150	°C

• Refer to MMBT3904 for graphs

ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=10μA, I_E=0	30		V
*Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1.0mA, I_B=0	25		V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=10μA, I_C=0	5		V
Collector Cutoff Current	I_{CBO}	V_{CB}=20V, I_E=0		50	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=3V, I_C=0		50	nA
*DC Current Gain	h_{FE}	V_{CE}=1V, I_C=2mA	120	360	
		V_{CE}=1V, I_C=50mA	60		
*Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=50mA, I_B=5.0mA		0.3	V
*Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C=50mA, I_B=5.0mA		0.95	V
Current Gain-Bandwidth Product	f_T	I_C=10mA, V_{CE}=20V f=100MHz	300		MHz
Output Capacitance	Cob	V_{CB}=5V, I_E=0 f=1.0MHz		4	pF
Noise Figure	NF	I_C=100μA, V_{CE}=5V R_S=1KΩ f=10Hz to 15.7KHz		5	dB

* Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%

Marking