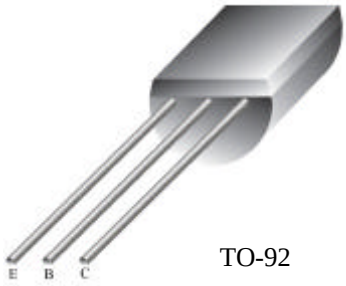
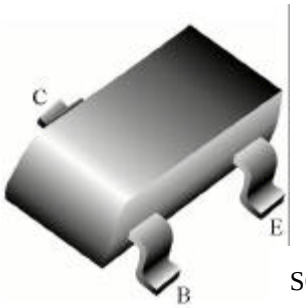
Minilogic Device Corporation

2N3904 MMBT3904



TO-92



SOT-23

E:Emitter B:Base C:Collector

NPN General Purpose Amplifier

This device is designed as a general purpose amplifier and switch.
The useful dynamic range extends to 100mA as a switch and to
100 MHz as an amplifier.

Absolute Maximum Ratings* T_A=25 °C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	40	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6.0	V
I_C	Collector Current – Continuous	200	mA
T_J , T_{STG}	Operating and Storage Junction Temperature Range	-55 to +150	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

1) These ratings are based on a maximum junction temperature of 150 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics T_A=25 °C unless otherwise noted

Symbol	Characteristic	Max		Units
		2N3904	MMBT3904	
P_D	Total Device Dissipation Derate above 25 °C	625 5.0	350 2.8	mW mW/ °C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	83.3		°C /W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	375	°C /W