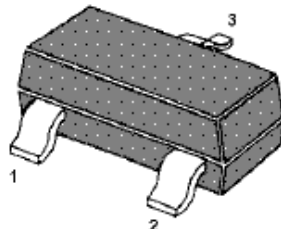


Kingtronics® Kt®**MMBT3904****NPN Silicon General Purpose Transistors**

For switching and amplifier applications



1.Base 2.Emitter 3.Collector

SOT-23 Plastic Package

Absolute Maximum Ratings (Ta = 25°C)

PARAMETER	SYMBOL	VALUE	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	200	mA
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at Ta = 25°C

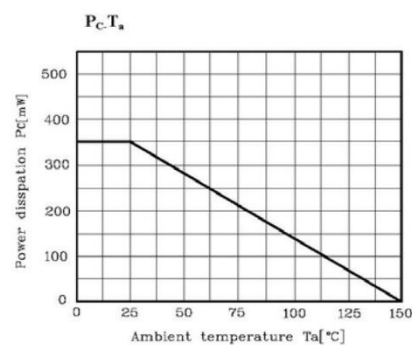
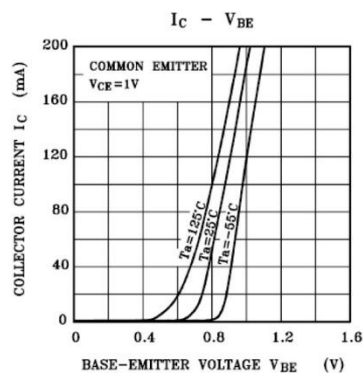
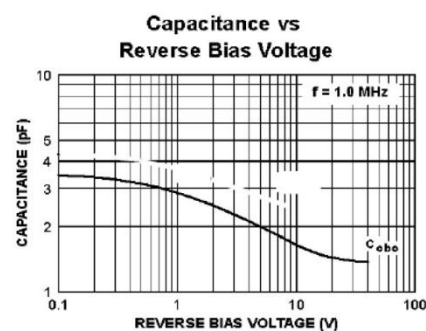
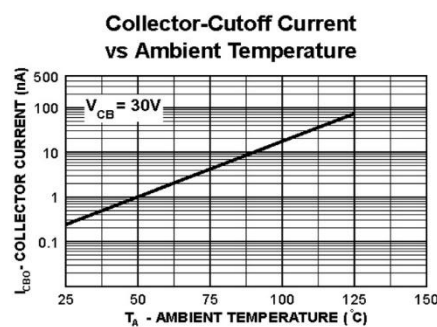
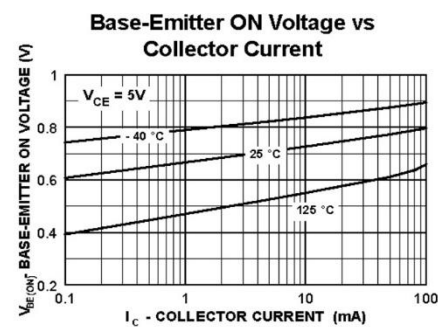
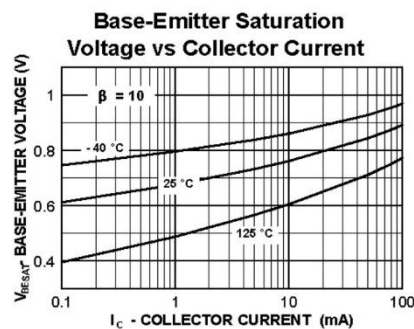
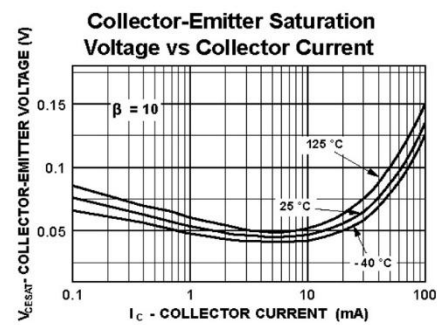
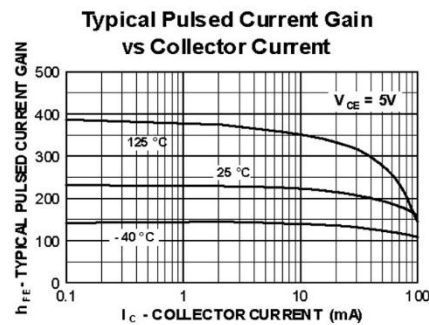
PARAMETER	SYMBOL	MIN.	MAX.	UNIT
DC Current Gain				
at $V_{CE} = 1\text{ V}$, $I_C = 0.1\text{ mA}$		40	-	
at $V_{CE} = 1\text{ V}$, $I_C = 1\text{ mA}$		70	-	
at $V_{CE} = 1\text{ V}$, $I_C = 10\text{ mA}$	h_{FE}	100	300	-
at $V_{CE} = 1\text{ V}$, $I_C = 50\text{ mA}$		60	-	
at $V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$		30	-	
Collector Base Cutoff Current	I_{CBO}	-	50	nA
Base Base Cutoff Current	I_{EBO}	-	50	nA
Collector Base Breakdown Voltage	$V_{(BR)CBO}$	60	-	V
Collector Emitter Breakdown Voltage	$V_{(BR)CEO}$	40	-	V
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	V
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	-	0.2 0.3	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	0.65 -	0.85 0.95	V
Current Gain Bandwidth Product	f_T	300	-	MHz
Collector Output Capacitance	C_{ob}	-	4	pF
Delay Time	t_d	-	35	ns
Rise Time	t_r	-	35	ns
Storage Time	t_s	-	200	ns
Fall Time	t_f	-	50	ns

Kingtronics® Kt®

MMBT3904

NPN Silicon General Purpose Transistors

RATINGS AND CHARACTERISTIC CURVES MMBT3904



Note: Specifications are subject to change without notice.