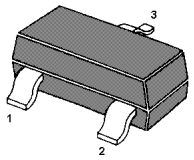
MMBT9018

NPN Silicon Epitaxial Planar Transistor

for AM/FM amplifier and local oscillator of
FM/VHF tuner applications



1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

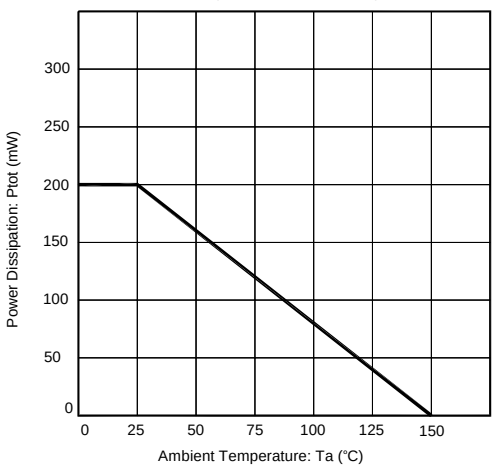
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	15	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

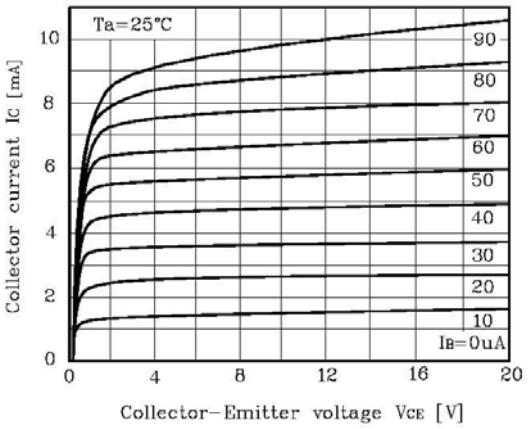
Electrical Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V_{CE} = 5 V, I_C = 1 mA	Current Gain Group G	h_{FE}	72	-	108	-
	H	h_{FE}	97	-	190	-
Collector Base Cutoff Current at V_{CB} = 12 V		I_{CBO}	-	-	50	nA
Collector Base Breakdown Voltage at I_C = 100 µA		$V_{(BR)CBO}$	30	-	-	V
Collector Emitter Breakdown Voltage at I_C = 1 mA		$V_{(BR)CEO}$	15	-	-	V
Emitter Base Breakdown Voltage at I_E = 100 µA		$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at I_C = 10 mA, I_B = 1 mA		$V_{CE(sat)}$	-	-	0.5	V
Collector Base Capacitance at V_{CB} = 10 V, f = 1 MHz		C_{ob}	-	1.3	1.7	pF
Gain Bandwidth Product at V_{CE} = 5 V, I_C = 5 mA		f_T	700	1100	-	MHz

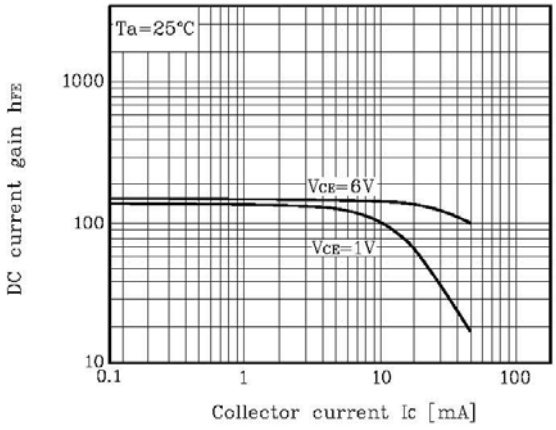
Pc-Ta



$I_C - V_{CE}$



$h_{FE} - I_C$



$f_T - I_E$