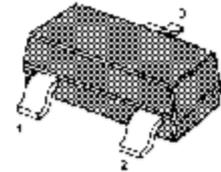


# MMBT9018G / MMBT9018H

**NPN Silicon Epitaxial Planar Transistor**  
for AM/FM amplifier and local oscillator of  
FM/VHF tuner applications



1. Base 2. Emitter 3. Collector

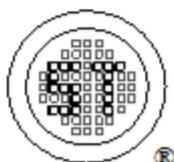
SOT-23 Plastic Package

..... (T<sub>a</sub> = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V <sub>CB0</sub>	30	V
Collector Emitter Voltage	V <sub>CE0</sub>	15	V
Emitter Base Voltage	V <sub>EB0</sub>	5	V
Collector Current	I <sub>c</sub>	50	mA
Power Dissipation	P <sub>tot</sub>	200	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>s</sub>	- 55 to + 150	°C

..... (T<sub>a</sub> = 25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V <sub>CE</sub> = 5 V, I <sub>c</sub> = 1 mA	MMBT9018G h <sub>FE</sub>	75	-	105	-
	MMBT9018H h <sub>FE</sub>	105	-	190	-
Collector Base Breakdown Voltage at I <sub>c</sub> = 100 μA	V <sub>(BR)CBO</sub>	30	-	-	V
Collector Emitter Breakdown Voltage at I <sub>c</sub> = 1 mA	V <sub>(BR)CEO</sub>	15	-	-	V
Emitter Base Breakdown Voltage at I <sub>E</sub> = 100 μA	V <sub>(BR)EBO</sub>	5	-	-	V
Collector Cutoff Current at V <sub>CB</sub> = 12 V	I <sub>CB0</sub>	-	-	50	nA
Collector Emitter Saturation Voltage at I <sub>c</sub> = 10 mA, I <sub>B</sub> = 1 mA	V <sub>CE(sat)</sub>	-	-	0.5	V
Gain Bandwidth Product at V <sub>CE</sub> = 5 V, I <sub>c</sub> = 5 mA	f <sub>t</sub>	700	1100	-	MHz
Collector Base Capacitance at V <sub>CB</sub> = 10 V, f = 1 MHz	C <sub>CB0</sub>	-	1.3	1.7	pF



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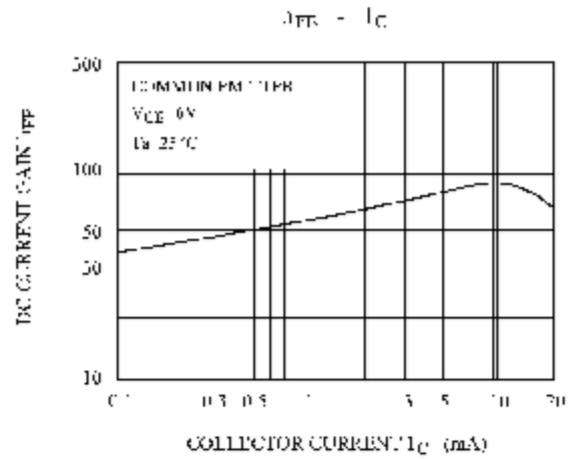
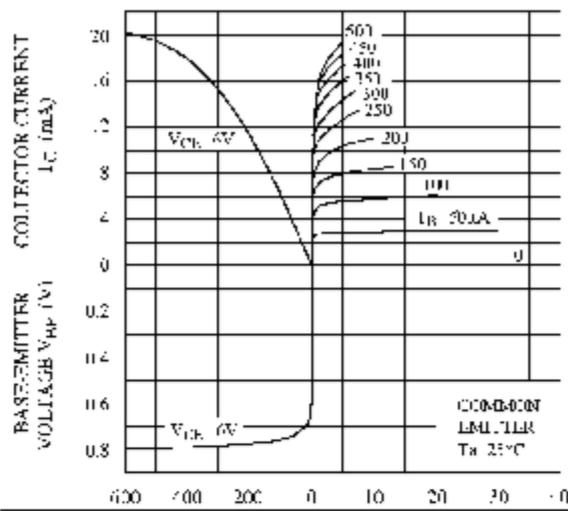
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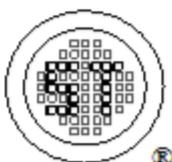
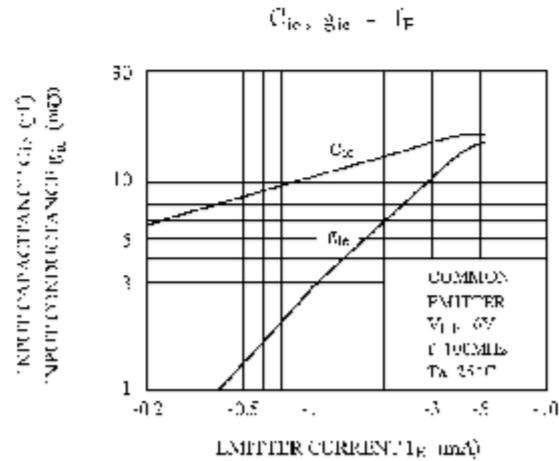
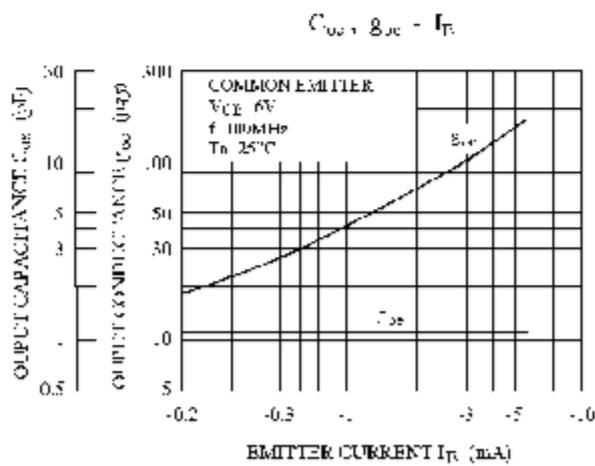
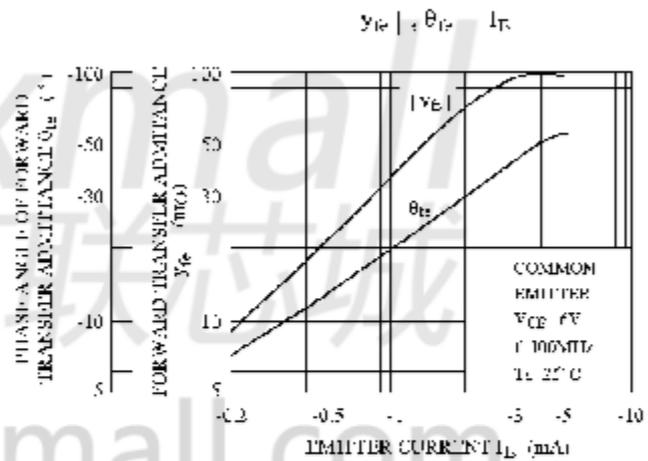
ISO/TS 16949 : 2002 Certificate No. 09103  
ISO 14001:2004 Certificate No. 7116  
ISO 9001:2000 Certificate No. 060808

# MMBT9018G / MMBT9018H

## STATIC CHARACTERISTICS



BASE CURRENT  $I_B$  ( $\mu A$ )      COLLECTOR-EMITTER VOLTAGE  $V_{CE}$  (V)



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ISO 9001:2000  
Certificate No. 09103

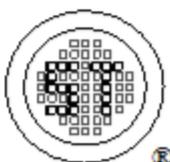
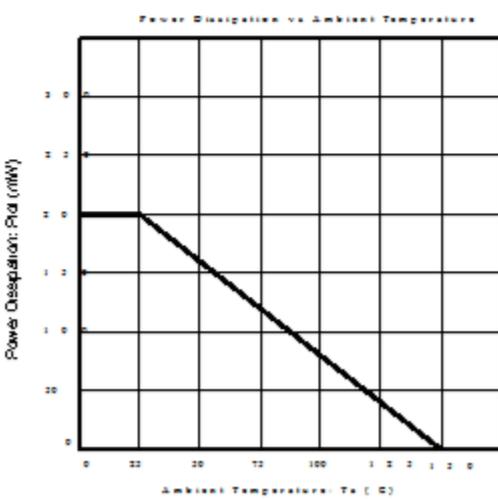
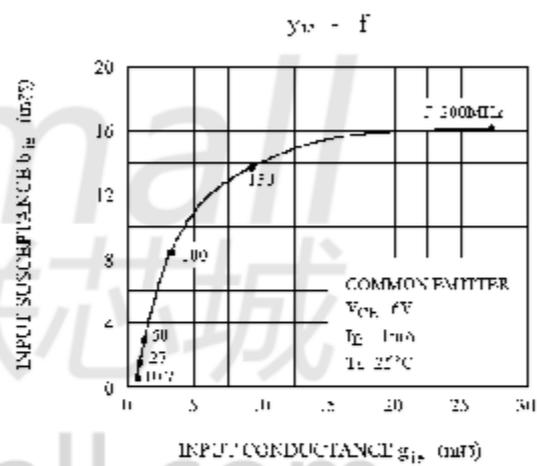
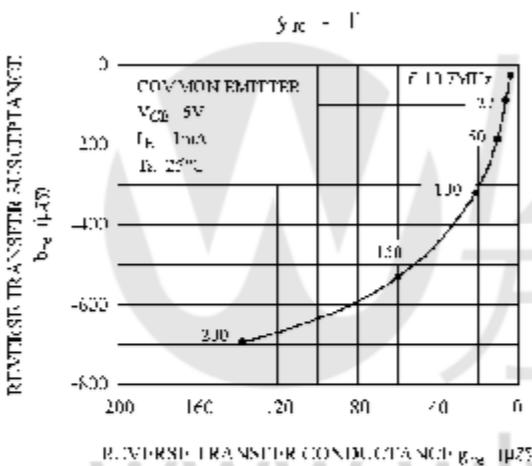
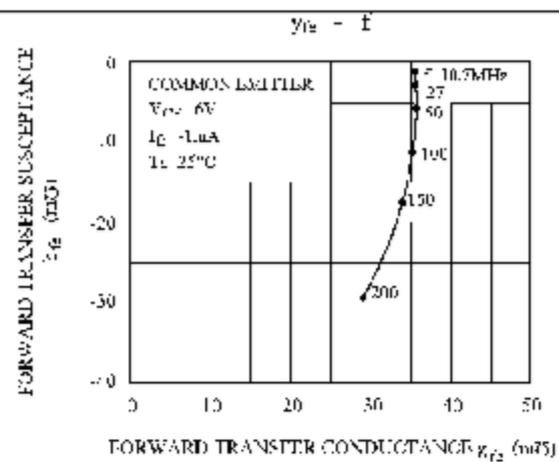
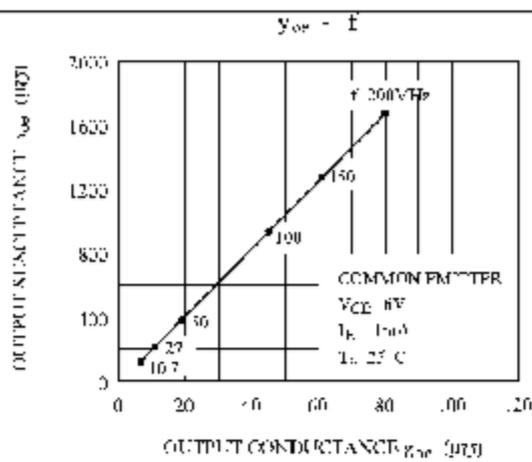


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