

MMBC1009F1

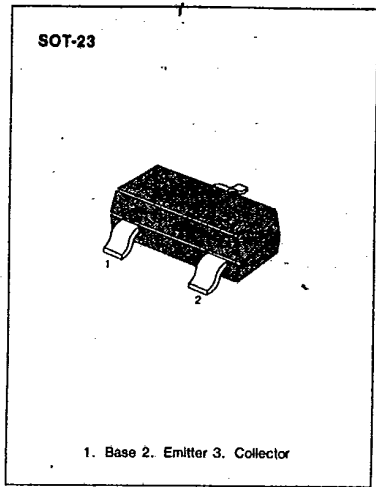
NPN EPITAXIAL SILICON TRANSISTOR

17-17

AM/FM RF AMPLIFIER TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	50	V
Collector-Emitter Voltage	V _{CE0}	25	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current	I _C	50	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{stg}	150	°C



ELECTRICAL CHARACTERISTICS (T_a = 25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I _{CB0}	V _{CB} =15V, I _E =0			100	nA
DC Current Gain	h _{FE}	V _{CE} =3V, I _C =0.5mA	30		60	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =1.0mA			0.3	V
Current Gain-Bandwidth Product	f _T	I _C =1mA, V _{CE} =6V f=100MHz	150			MHz
Output Capacitance	C _{ob}	V _{CB} =6V, I _E =0 f=1MHz		2		pF
Noise Figure	NF	I _C =0.5mA, V _{CE} =6V f=1MHz, R _g =500Ω		2.5		dB

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Marking

