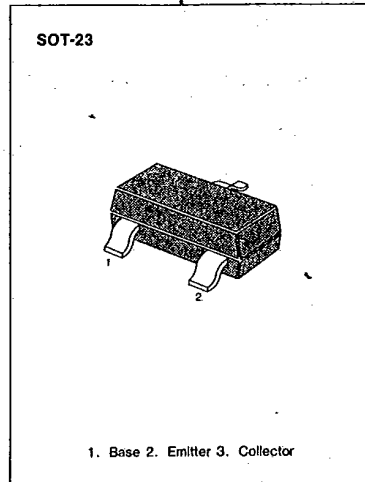


MMBR5179 NPN EPITAXIAL SILICON TRANSISTOR

RF AMPLIFIER TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	20	V
Collector-Emitter Voltage	V _{CE0}	12	V
Emitter-Base Voltage	V _{EB0}	2.5	V
Collector Current	I _C	50	mA
Collector Dissipation (T _a = 25°C)	P _C	350	mW
Derate above 25°C		2.8	mW/°C
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (T_a = 25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV _{CB0}	I _C = 0.01mA, I _E = 0	20		V
Collector-Emitter Breakdown Voltage	BV _{CE0}	I _C = 3mA, I _B = 0	12		V
Emitter Base Breakdown Voltage	BV _{EB0}	I _E = 0.01mA, I _C = 0	2.5		V
Collector Cutoff Current	I _{CB0}	V _{CB} = 15V, I _E = 0		0.02	μA
DC Current Gain	h _{FE}	V _{CE} = 1V, I _C = 3mA	25		
Collector Emitter Saturation Voltage	V _{CE (sat)}	I _C = 10mA, I _B = 1mA		0.4	V
Base-Emitter Saturation Voltage	V _{BE (sat)}	I _C = 10mA, I _B = 1mA		1	V
Current Gain Bandwidth Product	f _T	V _{CE} = 6V, I _C = 5mA, f = 100MHz	900		MHz
Collector Base Capacitance	C _{cb}	V _{CB} = 10V, I _E = 0, f = 0.1MHz to 1MHz		1	pF
Small Signal Current Gain	h _{fe}	V _{CE} = 6V, I _C = 2mA, f = 1KHz	25		
Noise Figure	NF	V _{CE} = 6V, I _C = 1.5mA, f = 200MHz R _S = 50Ω		4.5	dB
Common Emitter Amplifier Power Gain	G _{pe}	V _{CE} = 6V, I _C = 5mA, f = 200MHz	15		dB

Marking

