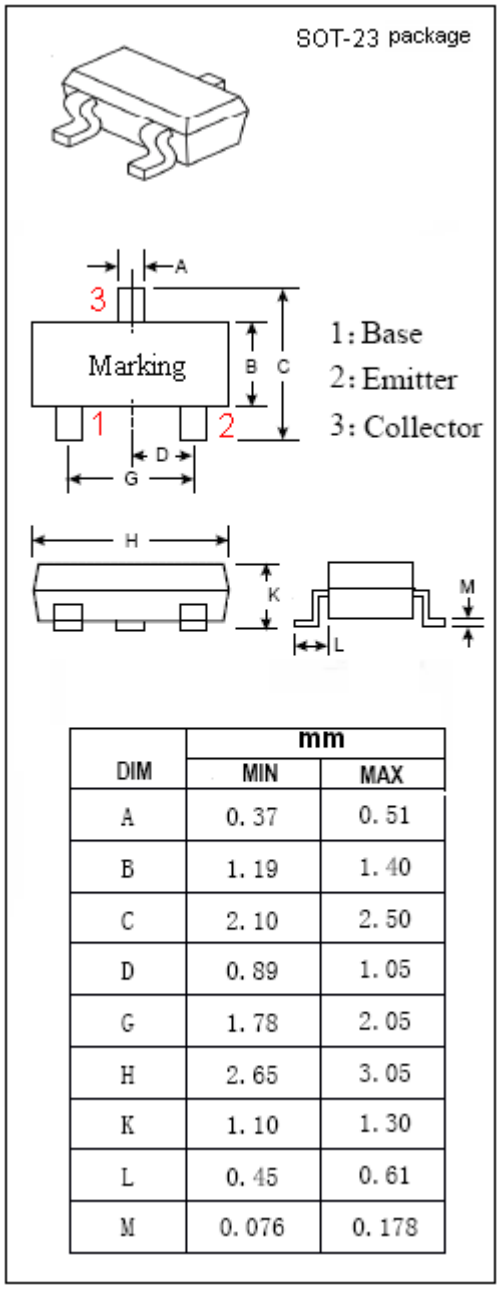
isc Silicon NPN RF Transistor MMBR901L

DESCRIPTION

- Low Noise
- High Power Gain-
  G_{pe} = 12.0 dB TYP. @ f = 1 GHz

APPLICATIONS

- Designed for use in high gain ,low noise , small signal amplifiers for operation up to 2.5GHz.



DIM	mm MIN	mm MAX
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
G	1.78	2.05
H	2.65	3.05
K	1.10	1.30
L	0.45	0.61
M	0.076	0.178

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	25	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	2	V
I_C	Collector Current-Continuous	30	mA
P_C	Collector Power Dissipation @T_C= 75℃	0.3	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	15			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 0.1mA ; I_E= 0	25			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 0.1mA ; I_C= 0	2			V
I_{CBO}	Collector Cutoff Current	V_{CB}= 15V; I_E= 0			0.05	μA
h_{FE}	DC Current Gain	I_C= 5mA ; V_{CE}= 5V	50		200	
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V; f= 1MHz			1.0	pF
f_T	Current-Gain—Bandwidth Product	I_C= 15mA ; V_{CE}= 10V; f= 1GHz		3.8		GHz
G_{pe}	Common-Emitter Amplifier Gain	I_C= 5mA ; V_{CC}= 6V; f= 1GHz		12		dB
NF_{min}	Minimum Noise Figure	I_C= 5mA ; V_{CE}= 6V; f= 1GHz		1.9		dB