

DESCRIPTION

The PBR951 is an NPN silicon epitaxial transistor designed for low noise amplifier at VHF, UHF and CATV band.

It has dynamic range and good current characteristic.

MARKING:W2W

FEATURES

- Low Noise and High Gain
NF = 1.1 dB TYP., $G_a = 11$ dB TYP. @ $V_{CE} = 10$ V, $I_c = 7$ mA, $f = 1.0$ GHz
- High Power Gain
MAG = 13 dB TYP. @ $V_{CE} = 10$ V, $I_c = 20$ mA, $f = 1.0$ GHz

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

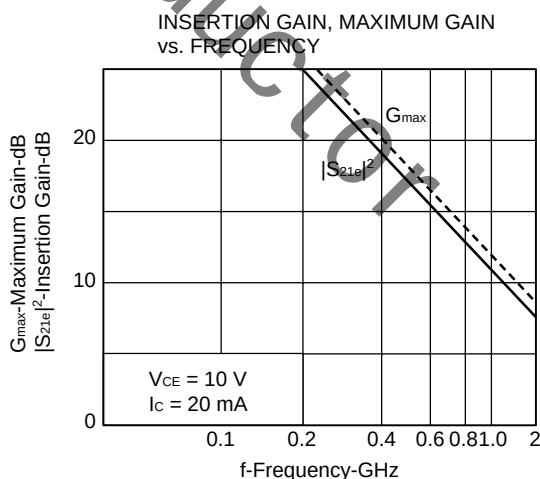
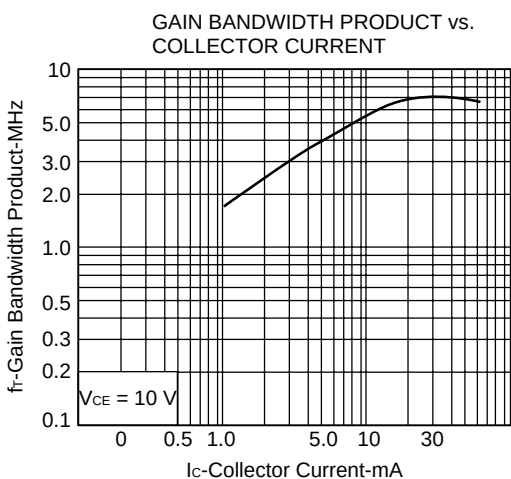
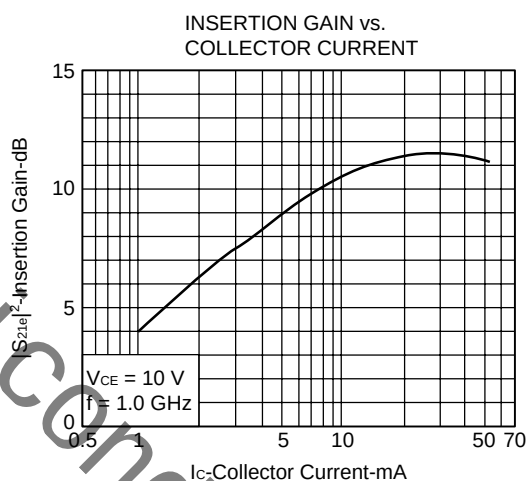
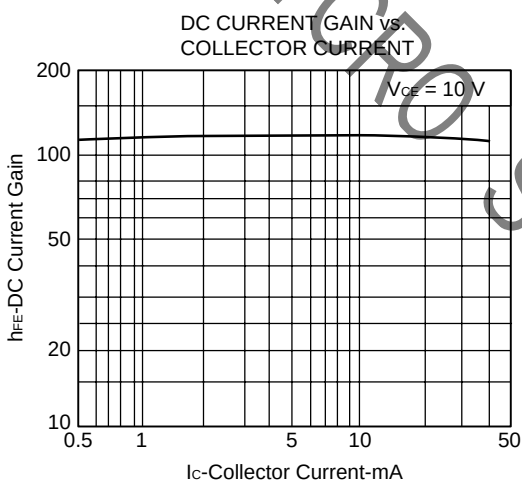
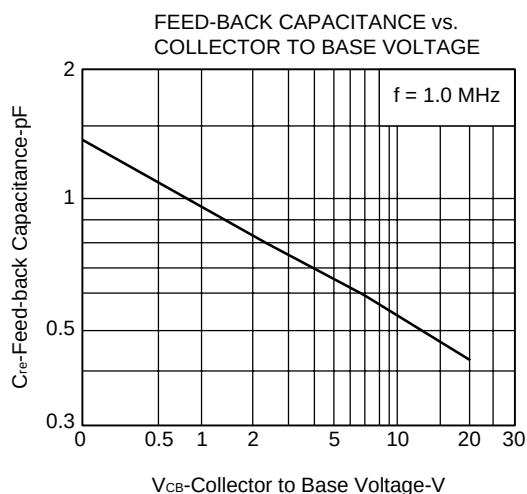
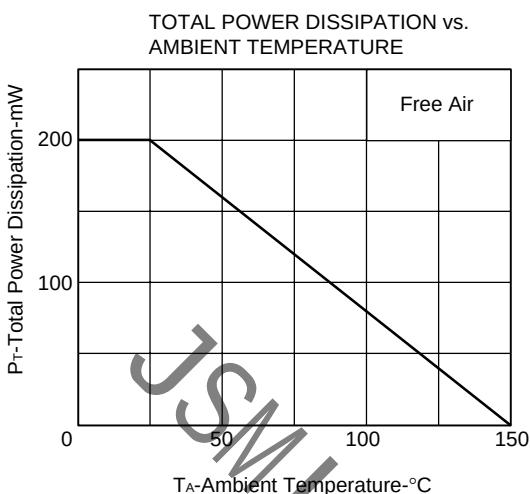
Collector to Base Voltage	V_{CBO}	20	V
Collector to Emitter Voltage	V_{CEO}	12	V
Emitter to Base Voltage	V_{EBO}	3.0	V
Collector Current	I_c	100	mA
Total Power Dissipation	P_T	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-65 to +150	$^\circ\text{C}$

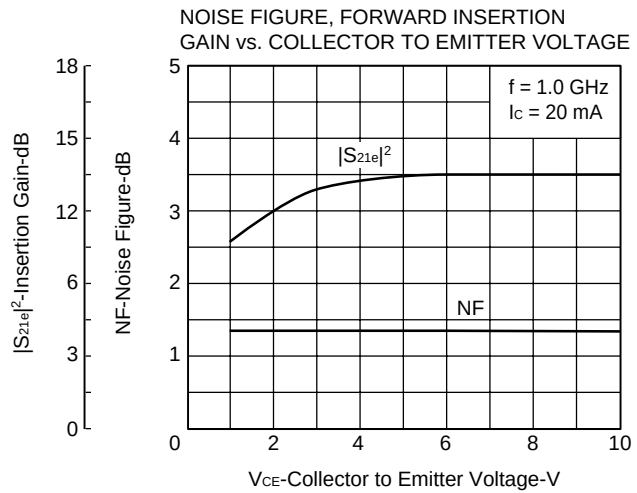
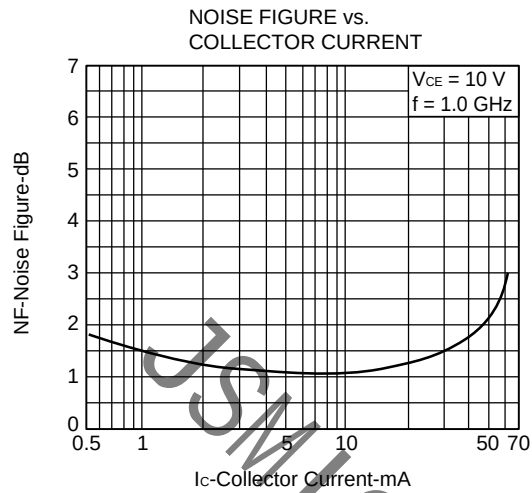
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	I_{CBO}			1.0	μA	$V_{CB} = 10$ V, $I_E = 0$
Emitter Cutoff Current	I_{EBO}			1.0	μA	$V_{EB} = 1.0$ V, $I_C = 0$
DC Current Gain	h_{FE}^*	50	120	300		$V_{CE} = 10$ V, $I_c = 20$ mA
Gain Bandwidth Product	f_T		7		GHz	$V_{CE} = 10$ V, $I_c = 20$ mA
Feed-Back Capacitance	C_{re}^{**}		0.55	1.0	pF	$V_{CB} = 10$ V, $I_E = 0$, $f = 1.0$ MHz
Insertion Power Gain	$ S_{21e} ^2$		11.5		dB	$V_{CE} = 10$ V, $I_c = 20$ mA, $f = 1.0$ GHz
Noise Figure	NF		1.1	2.0	dB	$V_{CE} = 10$ V, $I_c = 7$ mA, $f = 1.0$ GHz

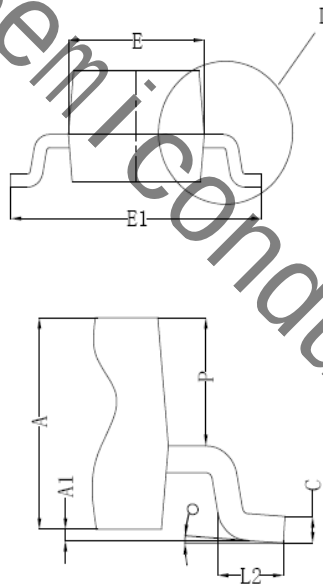
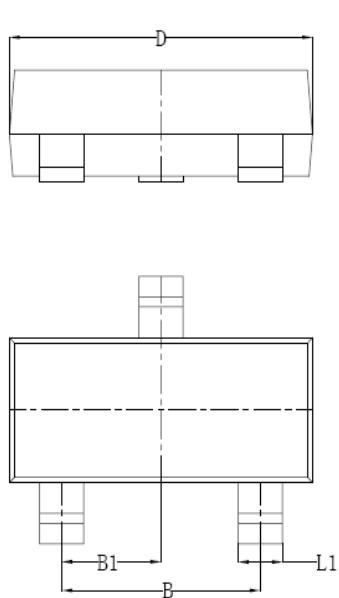
* Pulse Measurement $PW \leq 350 \mu\text{s}$, Duty Cycle $\leq 2\%$

** The emitter terminal and the case shall be connected to the guard terminal of the three-terminal capacitance bridge.

TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)




SOT23 Package outline



Symbol	Dim in mm		
	Min	Nor	Max
A	0.900	1.000	1.100
A1	0.000	0.050	0.100
L1	0.350	0.400	0.500
C	0.100	0.110	0.120
D	2.800	2.900	3.000
E	1.250	1.300	1.350
E1	2.250	2.400	2.550
B	1.800	1.900	2.000
B1	0.950 TYP		
L2	0.200	0.350	0.450
P	0.550	0.575	0.600

Detail L

单击下面可查看定价，库存，交付和生命周期等信息

[>>JSMSEMI\(杰盛微\)](#)