

9097250 TOSHIBA (DISCRETE/OPTO)

39C 00380 D T-31-15

マイクロモールド

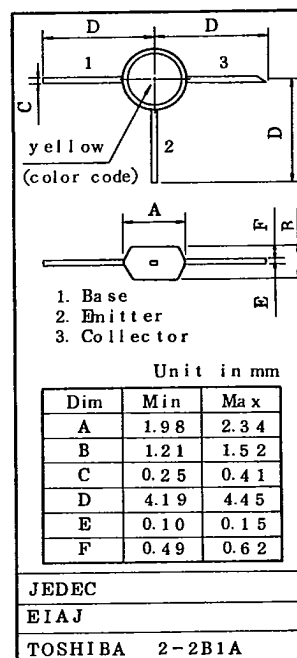
2SC2327

○ VHF~UHF 低雑音増幅用

○ VHF~UHF Low Noise Amplifier Applications

・ $NF = 1.7\text{dB}$, $|S_{21e}|^2 = 15\text{dB}$ ($f = 500\text{MHz}$)・ $NF = 2.5\text{dB}$, $|S_{21e}|^2 = 9.5\text{dB}$ ($f = 1000\text{MHz}$)最大定格 MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
コレクタ・ベース間電圧	V_{CBO}	20	V
コレクタ・エミッタ間電圧	V_{CEO}	20	V
エミッタ・ベース間電圧	V_{EBO}	2.0	V
コレクタ電流	I_C	30	mA
エミッタ電流	I_E	-30	mA
コレクタ損失	P_C	225	mW
接合温度	T_j	125	$^\circ\text{C}$
保存温度	T_{stg}	-55~125	$^\circ\text{C}$



SC---22327-1X

9097250 TOSHIBA (DISCRETE/OPTO)

2SC2327

39C 00381 D T-31-15

マイクロ波特性 MICROWAVE CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
雑音指数	NF	$V_{CE} = 10\text{V}, I_C = 3\text{mA}$ $f = 50\text{MHz}$	—	1.7	—	dB
		$V_{CE} = 10\text{V}, I_C = 3\text{mA}$ $f = 1000\text{MHz}$	—	2.5	—	dB
挿入電力利得	$ S_{21e} ^2$	$V_{CE} = 10\text{V}, I_C = 10\text{mA}$ $f = 50\text{MHz}$	—	15.0	—	dB
		$V_{CE} = 10\text{V}, I_C = 10\text{mA}$ $f = 1000\text{MHz}$	—	9.5	—	dB
トランジション周波数	f_T	$V_{CE} = 10\text{V}, I_C = 10\text{mA}$	—	4.5	—	GHz

電気的特性 ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

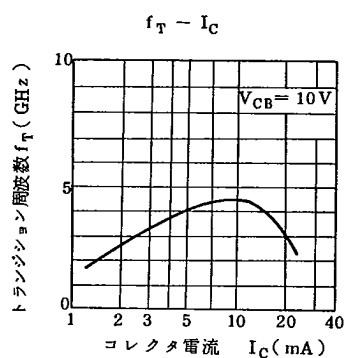
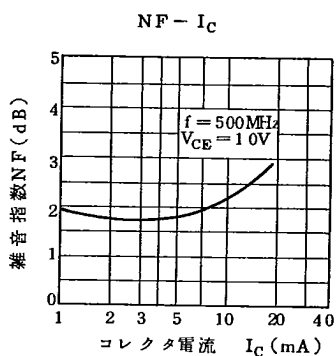
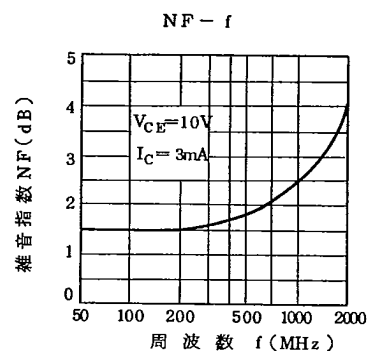
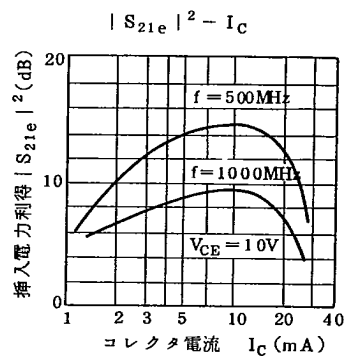
CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
コレクタシャ断電流	I_{CBO}	$V_{CB} = 10\text{V}, I_E = 0$	—	—	0.1	μA
エミッタシャ断電流	I_{EBO}	$V_{EB} = 10\text{V}, I_E = 0$	—	—	1.0	μA
直流電流増幅率	h_{FE}	$V_{CE} = 10\text{V}, I_C = 5\text{mA}$	30	—	—	—
コレクタ出力容量	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0$ $f = 1\text{MHz}$ (Note 1)	—	0.9	—	pF
帰還容量	C_{re}		—	0.6	—	pF

Note 1. C_{re} は Boonton Electronics Cop. 製 75D Direct Capacitance Bridge
によって三端子法で測定
 C_{re} is measured by 3 terminal method with Boonton Electronics
Corporation 75D Direct Capacitance Bridge.

SC---22327-2X

9097250 TOSHIBA (DISCRETE/OPTO)

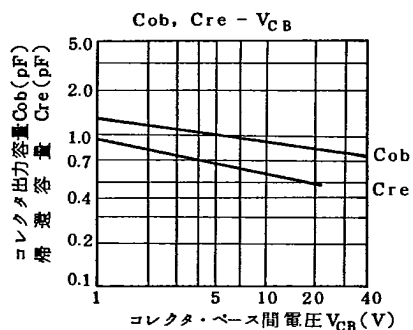
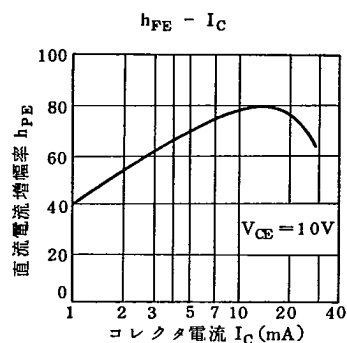
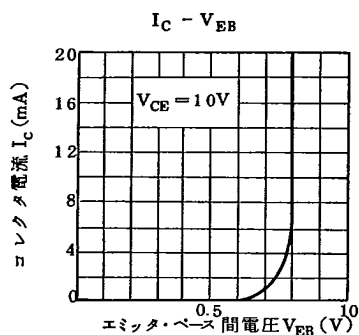
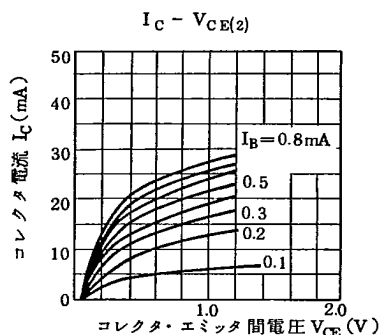
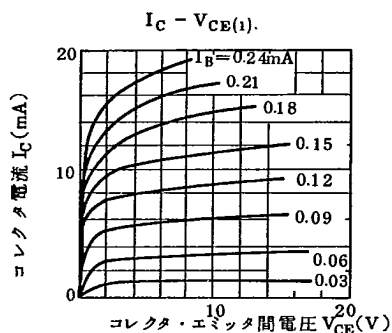
39C 00382 D T-31-15

2SC2327

S'C --- 22327-3X

9097250 TOSHIBA (DISCRETE/OPTO)

39C 00383 D T-31-15

2SC2327

5C---22327-4X

9097250 TOSHIBA (DISCRETE/OPTO)
39C 00384 D T-31-15

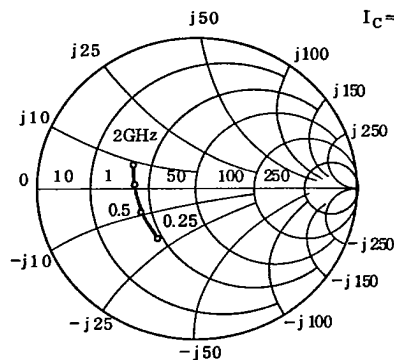
2SC2327

2SC2327 のエミッタ接地, 小信号Sパラメータ

COMMON EMITTER SMALL SIGNAL S-PARAMETERS OF 2SC2327

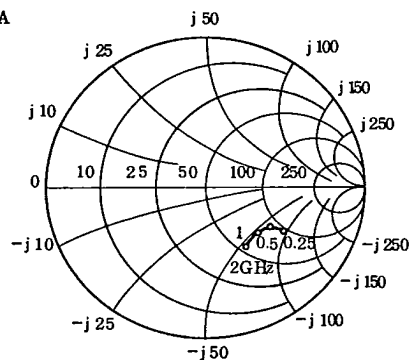
$V_{CE} = 10V$

$I_C = 10mA$



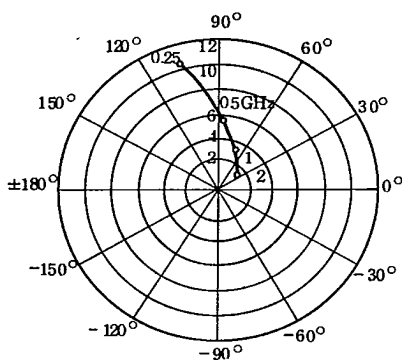
S_{11e}

(Unit in Ω)

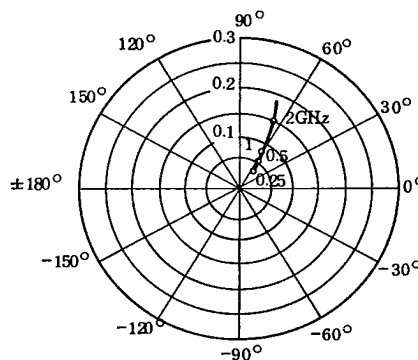


S_{22e}

(Unit in Ω)



S_{21e}



S_{12e}

SC --- 22327-SX