Elektronische Bauelemente

2SC3356F

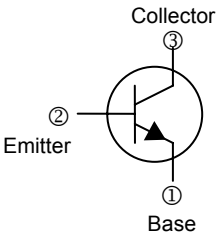
NPN Silicon
Plastic Encapsulated Transistor

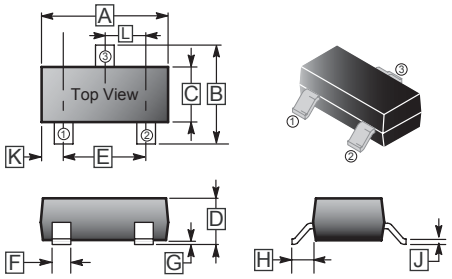
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

SOT-323

FEATURES

- Low noise amplifier at VHF, UHF and CATV band.
- Low Noise and High Gain
- High Power Gain





MARKING

REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	20	V
Collector to Emitter Voltage	V_{CEO}	12	V
Emitter to Base Voltage	V_{EBO}	3	V
Collector Current - Continuous	I_C	0.1	A
Total Device Dissipation	P_C	200	mW
Junction and Storage Temperature	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector–Base Breakdown Voltage	BV_{CBO}	20	-	-	V	I_C=10μA, I_E=0
Collector–Emitter Breakdown Voltage	BV_{CEO}	12	-	-	V	I_C= 1mA, I_B=0
Collector Cut-off Current	I_{CBO}	-	-	1	μA	V_{CB}=10V, I_E=0
Emitter Cut-off Current	I_{EBO}			1	μA	V_{EB}=1V, I_C=0
DC Current Gain	h_{FE}*	50	-	250		V_{CE}=10V, I_C= 20mA
Transition Frequency	f_T	-	7	-	GHz	V_{CE}=10V, I_C= 20mA
Collector Output Capacitance	NF	-	-	2	dB	V_{CE}=10V, I_C= 7mA, f = 1GHz

*pulse test: pulse width ≤ 350μs, Duty cycle ≤ 2%

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Coding	23	24	25
Range	50 - 100	80 - 160	125 – 250
Marking	R**23**	R**24**	R**25**

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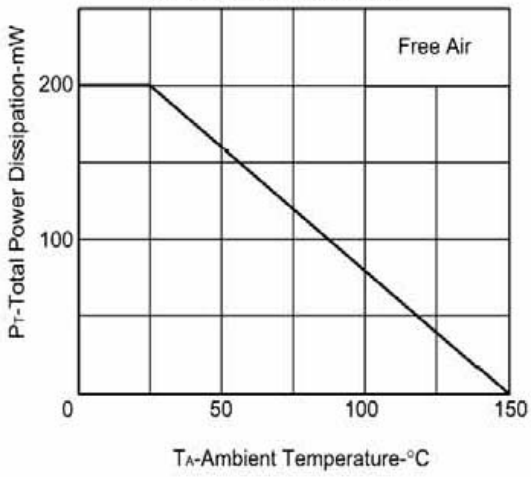
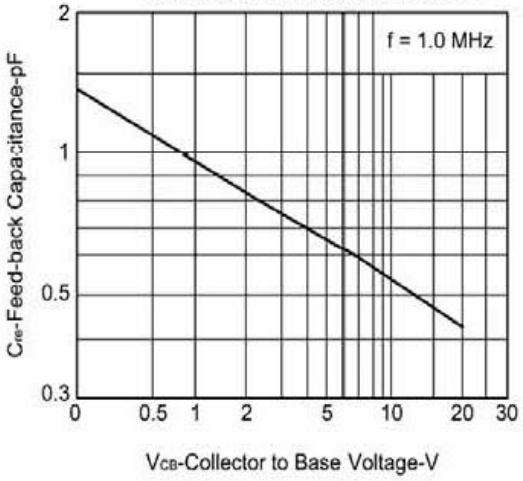
CHARACTERISTICS CURVE

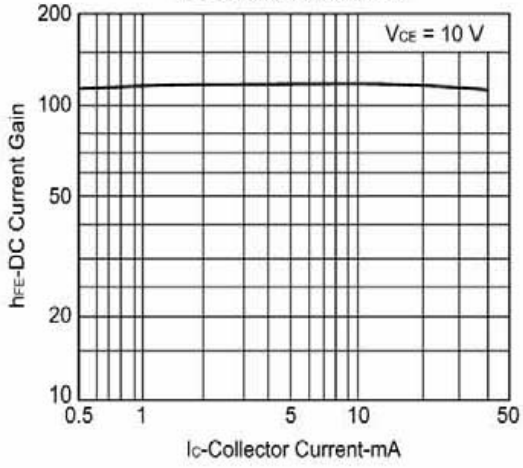
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



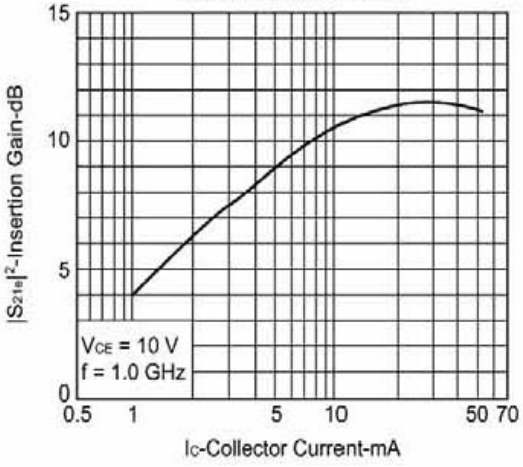
FEED-BACK CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE



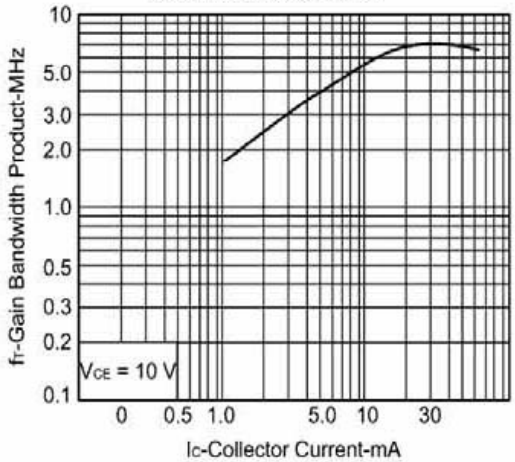
DC CURRENT GAIN vs. COLLECTOR CURRENT



INSERTION GAIN vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT



INSERTION GAIN, MAXIMUM GAIN vs. FREQUENCY