

## FEATURES

- Low noise and high gain.  
NF=1.1dB TYP., $G_a=11$ dB TYP.  
@ $V_{CE}=10V, I_C=7mA, f=1.0GHz$
- High power gain. MAG=13dB TYP.  
@ $V_{CE}=10V, I_C=20mA, f=1.0GHz$

## 2SC3356



## APPLICATIONS

- Designed for low noise amplifier at VHF,UHF and CATV band.

### MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	20	V
$V_{CEO}$	Collector-Emitter Voltage	12	V
$V_{EBO}$	Emitter-Base Voltage	3	V
$I_C$	Collector Current -Continuous	100	mA
$P_C$	Collector Dissipation	200	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-65~150	$^{\circ}C$

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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector cut-off current	$I_{CBO}$	$V_{CB}=10V, I_E=0$			1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=1V, I_C=0$			1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=10V, I_C=20mA$	50	120	300	
Transition frequency	$f_T$	$V_{CE}=10V, I_C=20mA$		7		GHz
Insertion power gain	$ S_{21e} ^2$	$V_{CE}=10V, I_C=20mA, f=1GHz$		11.5		dB
Feed-back capacitance	$C_{re}$	$V_{CB}=10V, I_E=0, f=1MHz$		0.55	1.0	pF
Noise Figure	NF	$V_{CE}=10V, I_C=7mA, f=1GHz$		1.1	2.0	dB

## CLASSIFICATION OF $h_{FE}$

Rank	Q	R	S
Range	50-100	80-160	125-300
Marking	R23	R24	R25

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