

**2SC3356****NPN SILICON TRANSISTOR****HIGH FREQUENCY LOW NOISE AMPLIFIER****DESCRIPTION**

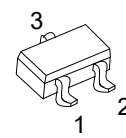
The UTC **2SC3356** is an NPN silicon epitaxial transistor designed for low noise amplifier at VHF, UHF and CATV band.

It has large dynamic range and good current characteristic..

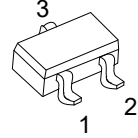
FEATURES

* Low Noise and High Gain

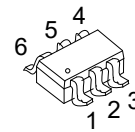
* High Power Gain



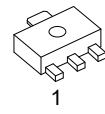
SOT-23-3
(JEDEC TO-236)



SOT-23
(EIAJ SC-59)



SOT-26



SOT-89

ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
2SC3356L-x-AB3-R	2SC3356G-x-AB3-R	SOT-89	B	C	E	-	-	-	Tape Reel
2SC3356L-x-AE2-R	2SC3356G-x-AE2-R	SOT-23-3	B	E	C	-	-	-	Tape Reel
2SC3356L-x-AE3-R	2SC3356G-x-AE3-R	SOT-23	B	E	C	-	-	-	Tape Reel
2SC3356L-x-AG6-R	2SC3356G-x-AG6-R	SOT-26	C	C	B	E	C	C	Tape Reel

Note: Pin Assignment: B: Base E: Emitter C: Collector

2SC3356G-x-AB3-R	(1) R: Tape Reel (2) AB3: SOT-89, AE2: SOT-23-3, AE3: SOT-23 AG6: SOT-26 (3) x: refer to Classification of h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free
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MARKING

SOT-23-3/SOT-23	
2SC3356L	2SC3356G
SOT-89	SOT-26

■ ABSOLUTE MAXIMUM RATING

PARAMETER		SYMBOL	RATINGS	UNIT
Collector to Base Voltage		BV_{CBO}	20	V
Collector to Emitter Voltage		BV_{CEO}	12	V
Emitter to Base Voltage		BV_{EBO}	3	V
Collector Current		I_C	100	mA
Power Dissipation	SOT-89	P_D	500	mW
	SOT-23-3		200	mW
	SOT-23			
	SOT-26			
Junction Temperature		T_J	+150	°C
Storage Temperature		T_{STG}	-65 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

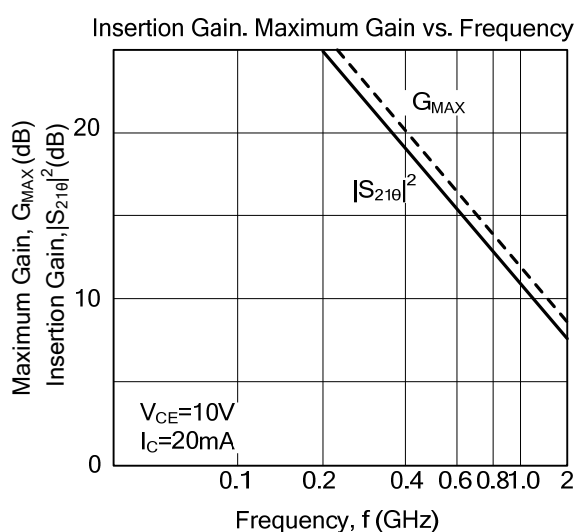
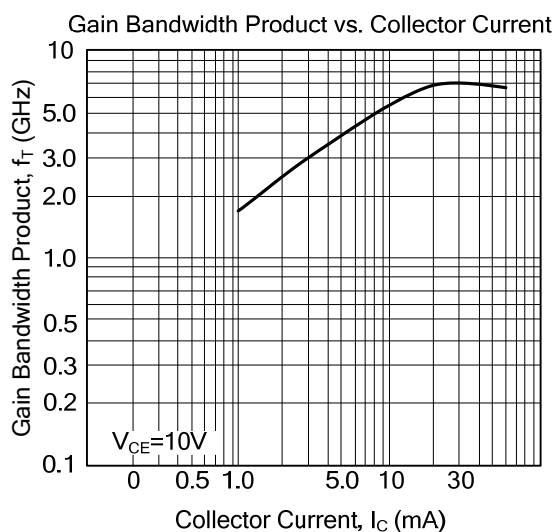
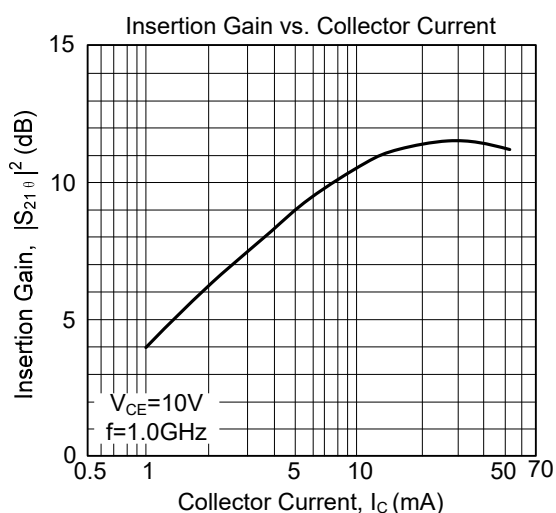
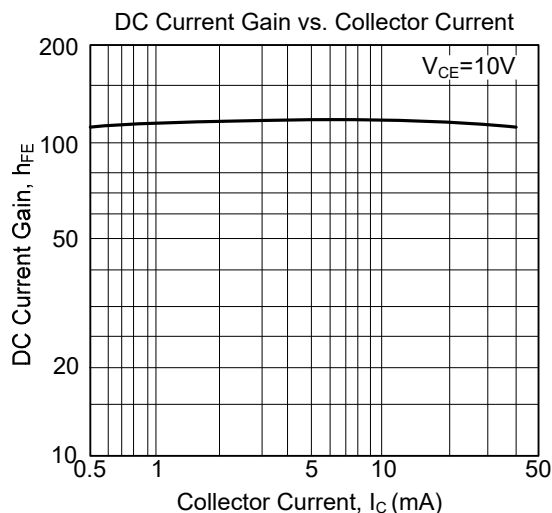
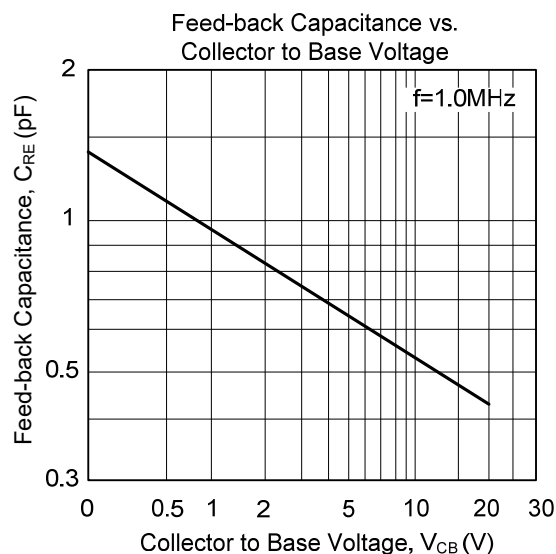
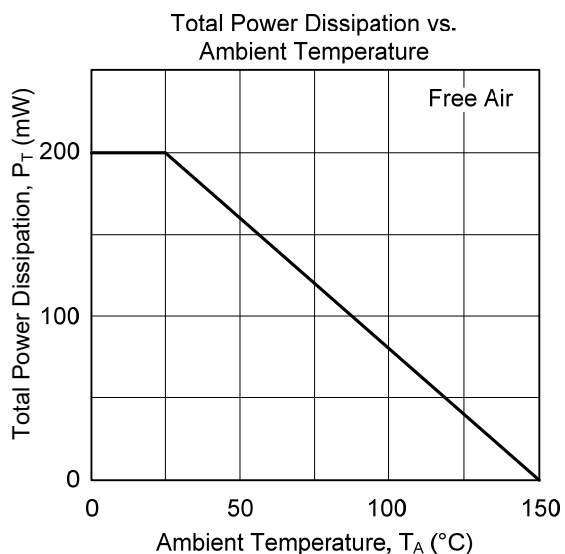
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector to Base Breakdown Voltage	BV_{CBO}	$I_C=10\mu\text{A}$, $I_E=0$	20			V
Collector to Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}$, $R_{BE}=\infty$	12			V
Emitter to Base Breakdown Voltage	BV_{EBO}	$I_E=10\mu\text{A}$, $I_C=0$	3			V
Collector-Base Cut-Off Current	I_{CBO}	$V_{CB}=10\text{V}$, $I_E=0$			1.0	μA
Emitter-Base Cut-Off Current	I_{EBO}	$V_{EB}=1\text{V}$, $I_C=0$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=10\text{V}$, $I_C=20\text{mA}$	50		300	
Gain Bandwidth Product	f_T	$V_{CE}=10\text{V}$, $I_C=20\text{mA}$		7		GHz
Feed-Back Capacitance	C_{RE}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1.0\text{MHz}$			1.0	pF
Noise Figure	NF	$V_{CE}=10\text{V}$, $I_C=7\text{mA}$, $f=1.0\text{GHz}$			2.0	dB

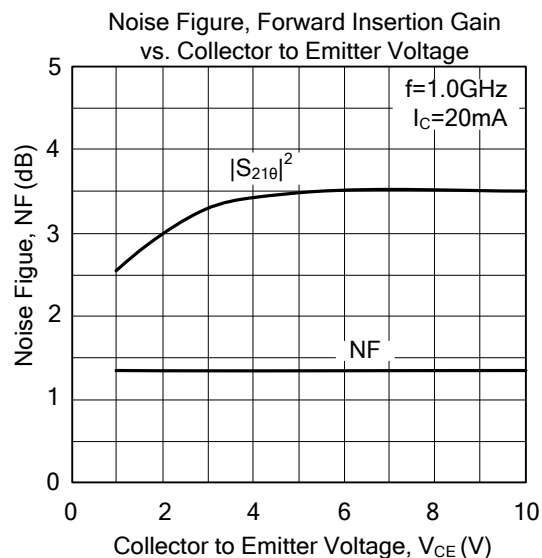
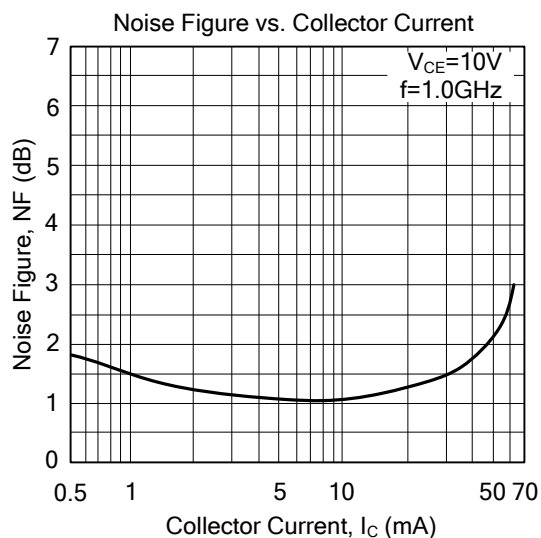
■ CLASSIFICATION OF h_{FE}

RANK	A	B
RANGE	50-170	160-300

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS (Cont.)



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