



2SC3356

NPN SILICON TRANSISTOR

HIGH FREQUENCY LOW NOISE AMPLIFIER

DESCRIPTION

The UTC **2SC3356** is designed for such applications as: DC/DC converters, supply line switching, battery charger, LCD backlighting, peripheral drivers, Driver in low supply voltage applications (e.g. lamps and LEDs) and inductive load driver (e.g. relays, buzzers and motors).

FEATURES

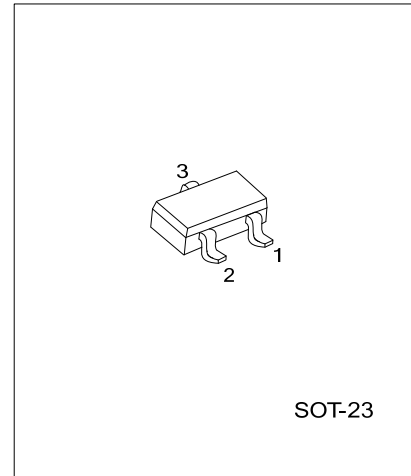
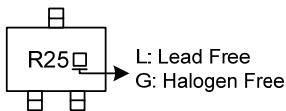
- * Low Noise and High Gain
- * High Power Gain

ORDERING INFORMATION

Ordering Number			Package	Pin Description			Packing
Normal	Lead Free Plating	Halogen Free		1	2	3	
2SC3356-x-AE3-R	2SC3356L-x-AE3-R	2SC3356G-x-AE3-R	SOT-23	E	B	C	Tape Reel

<p>2SC3356L-x-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Lead Plating</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23 (3) x: refer to Classification of hFE (4) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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MARKING



■ 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	P_D	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-65~ +150	°C

Notes: 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-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

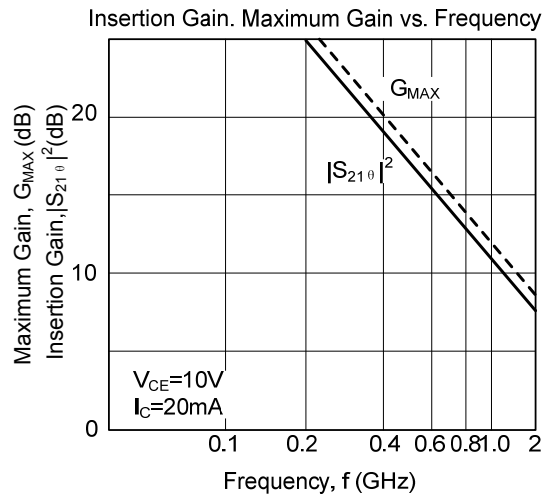
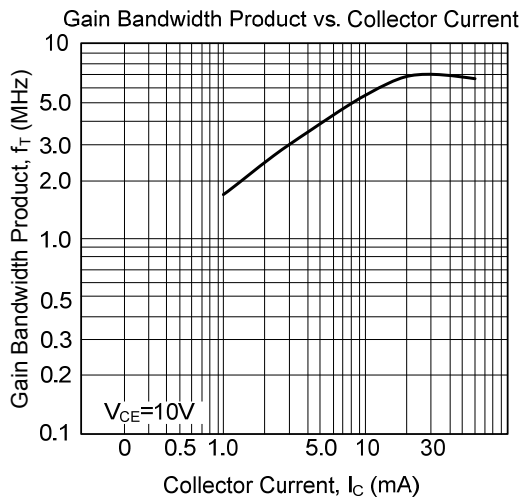
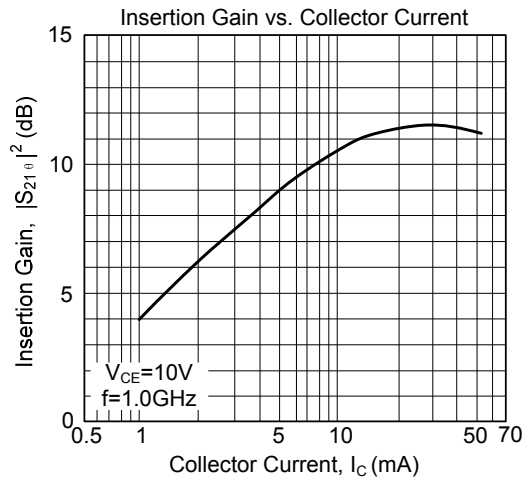
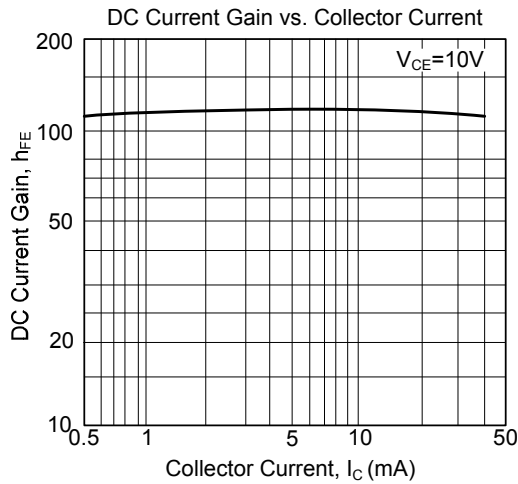
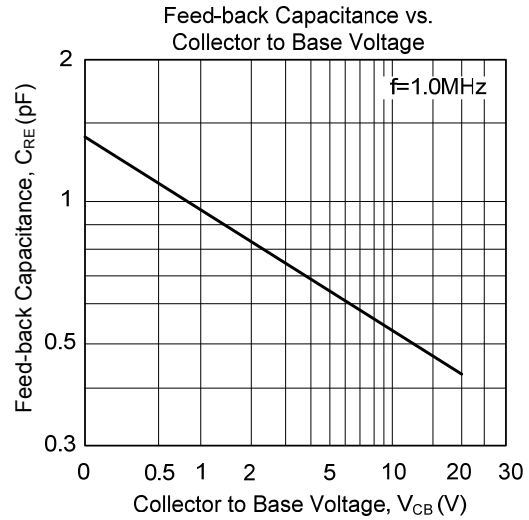
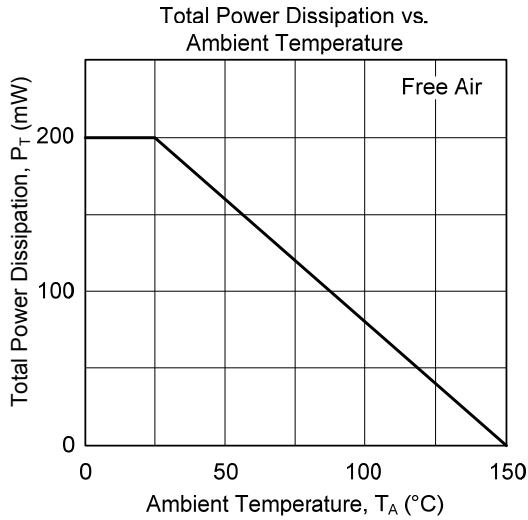
■ CLASSIFICATION OF h_{FE}

RANK	A	B	C
RANGE	50-160	160-240	240-300

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TYPICAL CHARACTERISTICS

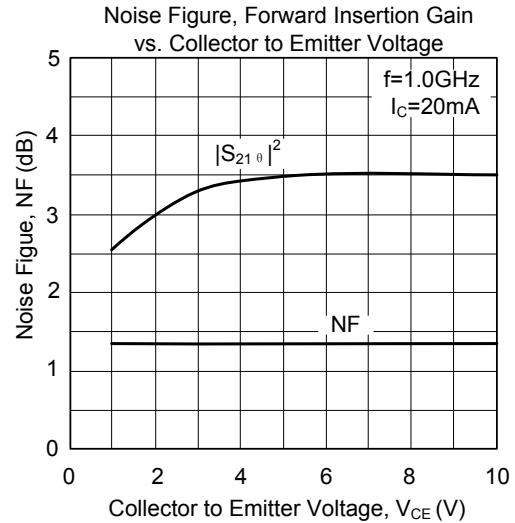
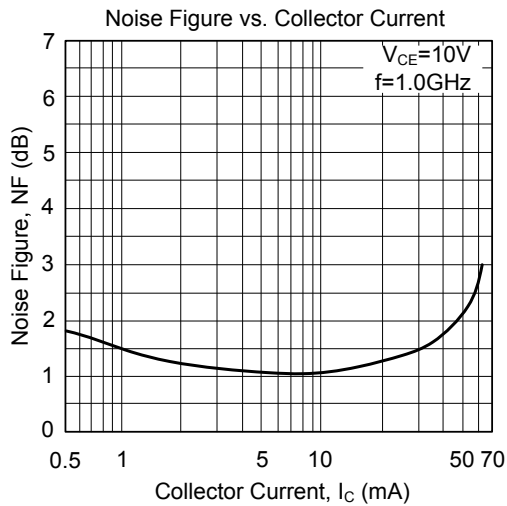




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■ TYPICAL CHARACTERISTICS(Cont.)



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