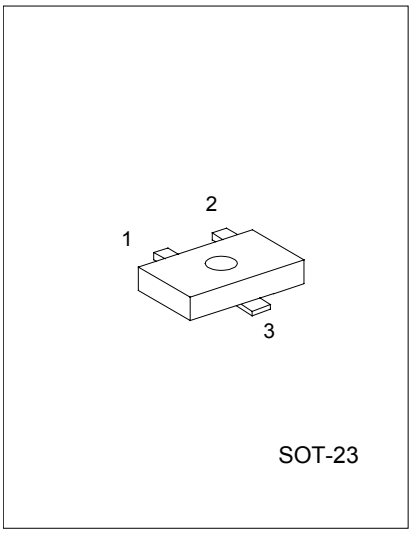
UTC 2SC3356 NPN SILICON EPITAXIAL TRANSISTOR

HIGH FREQUENCY LOW NOISE AMPLIFIER

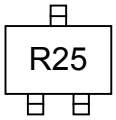


1: EMITTER 2: BASE 3: COLLECTOR

FEATURES

*Low Noise and High Gain
*High Power Gain

MARKING



ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	20	V
Collector-emitter voltage	V_{CEO}	12	V
Emitter-base voltage	V_{EBO}	3	V
Collector current	Ic	100	mA
Total power dissipation	P_T	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-65 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

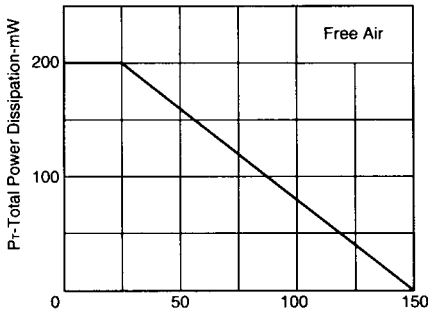
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cutoff Current	I_{CBO}	V_{CB}=10V, I_E=0			1.0	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=1V, I_C=0			1.0	μA
DC Current Gain	h_{FE}	V_{CE}=10V, I_C=20mA	50		300	
Gain bandwidth Product	fT	V_{CE}=10V, I_C=20mA		7		GHz
Feed-Back Capacitance	Cre	V_{CB}=10V, I_E=0, f=1.0MHz			1.0	pF
Noise figure	NF	V_{CE}=10V, I_C=7mA, f=1.0GHz			2.0	dB

CLASSIFICATION OF hFE

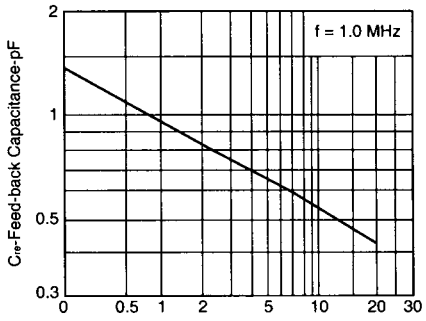
RANK	A	B	C
RANGE	50-160	160-240	240-300

TYPICAL CHARACTERISTICS (TA=25°C)

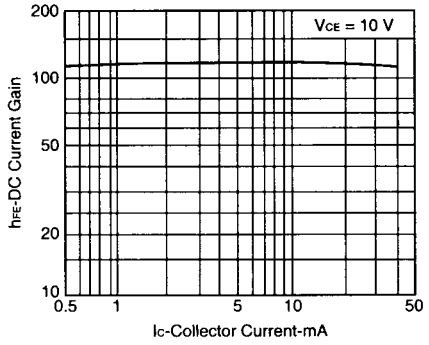
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



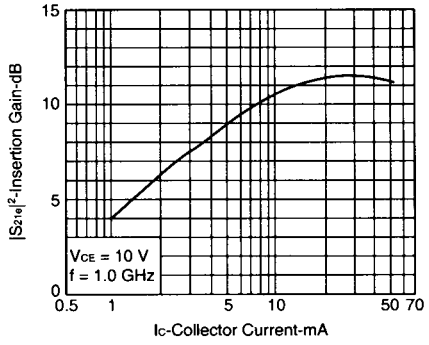
FEED-BACK CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE



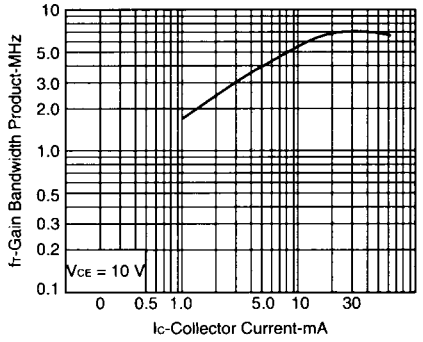
DC CURRENT GAIN vs. COLLECTOR CURRENT



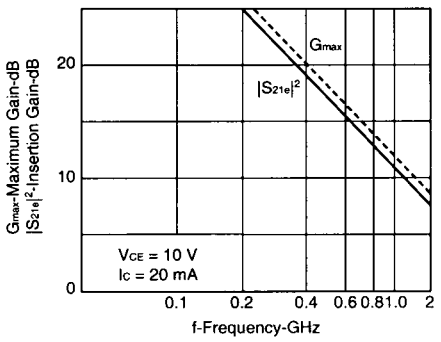
INSERTION GAIN vs. COLLECTOR CURRENT



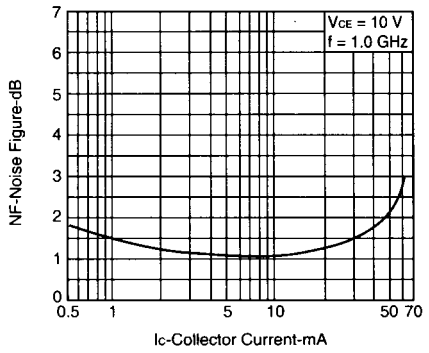
GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT



INSERTION GAIN, MAXIMUM GAIN vs. FREQUENCY



NOISE FIGURE vs.
COLLECTOR CURRENT



NOISE FIGURE, FORWARD INSERTION
GAIN vs. COLLECTOR TO EMITTER VOLTAGE