

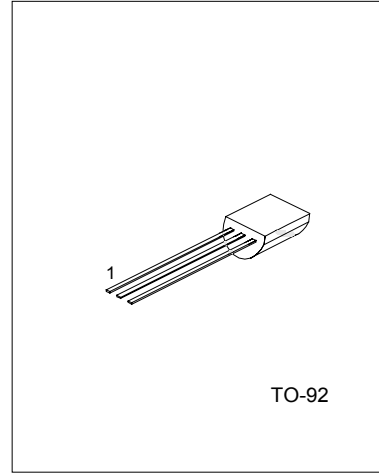
# UTC 2SC3355

# NPN SILICON EPITAXIAL TRANSISTOR

## HIGH FREQUENCY LOW NOISE AMPLIFIER

### FEATURES

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



1: BASE 2: EMITTER 3: COLLECTOR

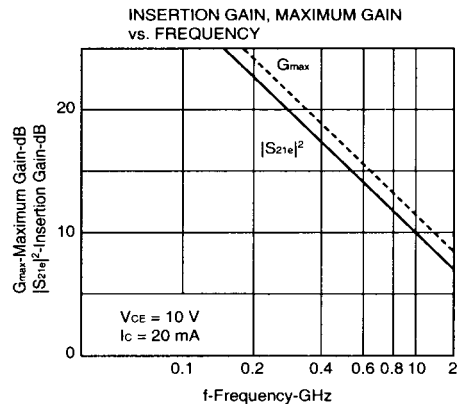
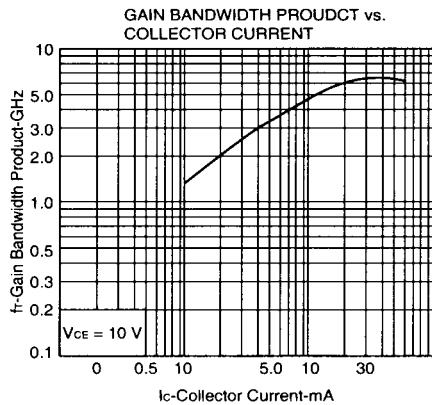
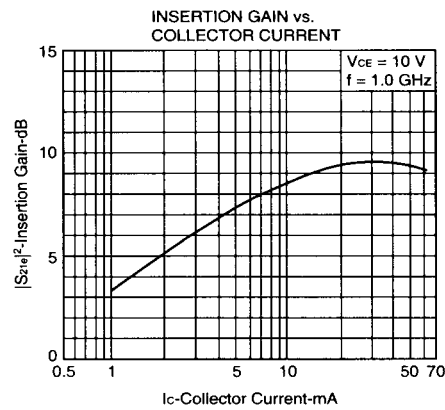
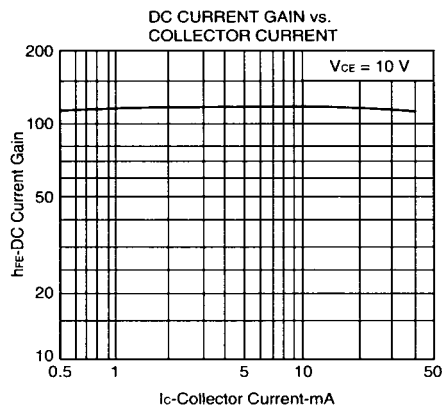
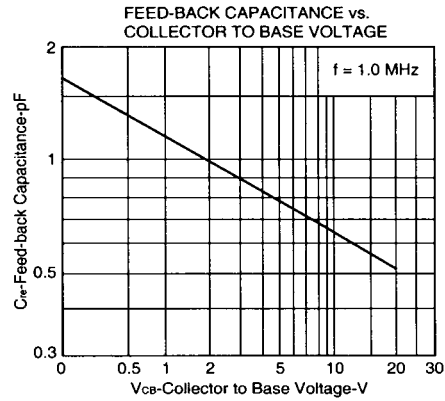
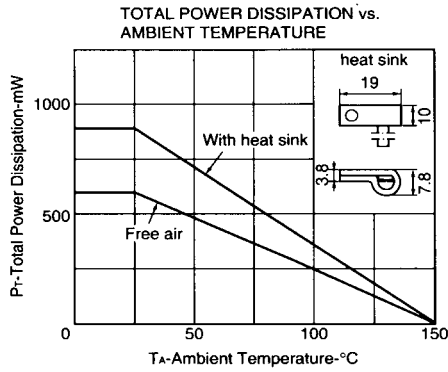
### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise specified)

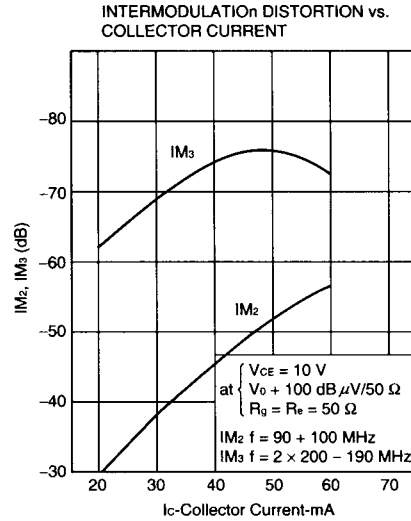
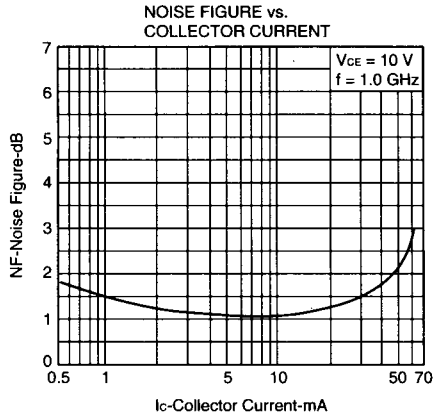
PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	20	V
Collector-emitter voltage	V <sub>CEO</sub>	12	V
Emitter-base voltage	V <sub>EB0</sub>	3	V
Collector current	I <sub>C</sub>	100	mA
Total power dissipation	P <sub>T</sub>	600	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-65 ~ +150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0			1.0	μA
Emitter Cutoff Current	I <sub>EB0</sub>	V <sub>EB</sub> =1V, I <sub>C</sub> =0			1.0	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =20mA	50		300	
Gain bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =20mA		7		GHz
Feed-Back Capacitance	C <sub>re</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz			1.0	pF
Noise Figure	NF	V <sub>CE</sub> =10V, I <sub>C</sub> =7mA, f=1.0GHz		1.1		dB

TYPICAL CHARACTERISTICS (TA=25°C)





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