

KSC2759

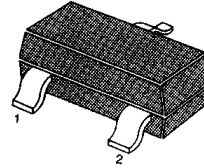
NPN EPITAXIAL SILICON TRANSISTOR

MIXER, OSCILLATOR FOR UHF TUNER

ABSOLUTE MAXIMUM RATINGS (T_A =25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	30	V
Collector-Emitter Voltage	V _{CEO}	14	V
Emitter-Base Voltage	V _{EBO}	3	V
Collector Current	I _C	50	mA
Collector Dissipation	P _C	150	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55-150	°C

SOT-23



1. Base 2. Emitter 3. Collector

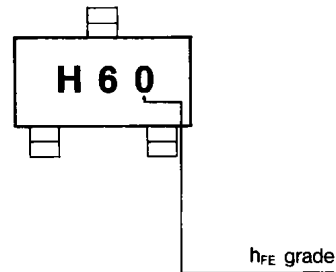
ELECTRICAL CHARACTERISTICS (T_A=25°C)

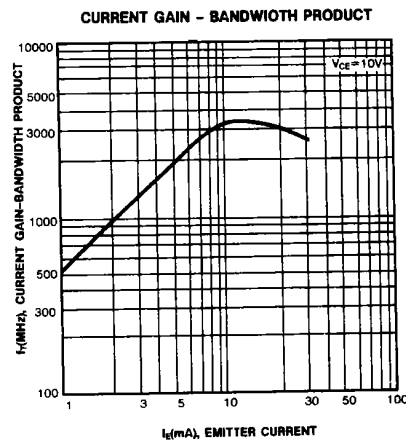
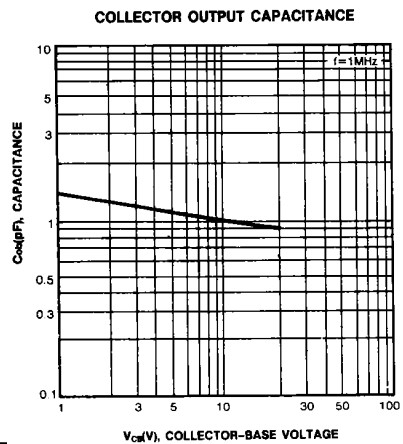
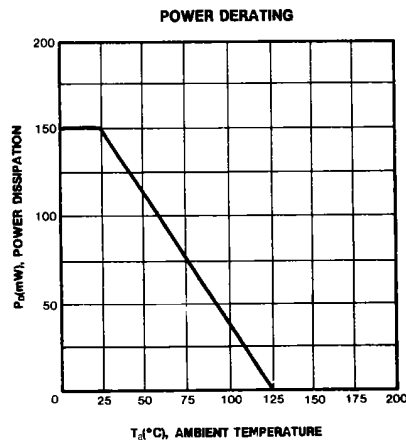
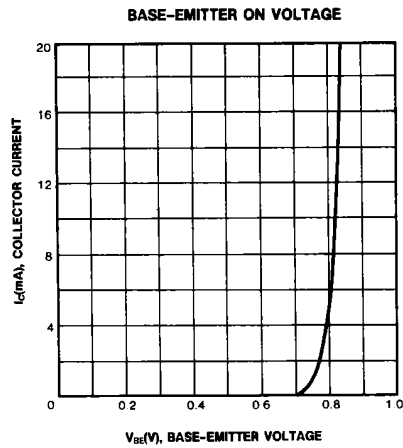
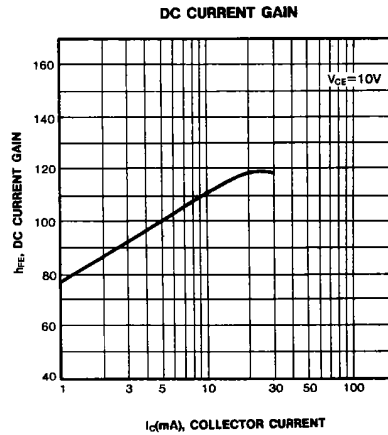
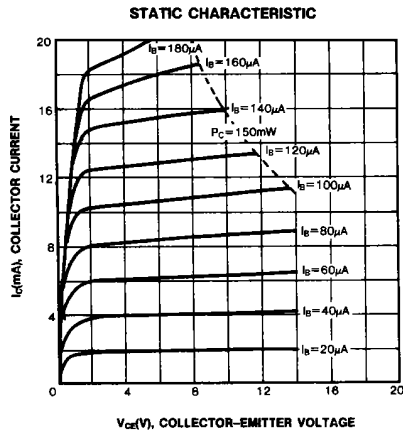
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =15V, I _E =0			0.1	μA
DC Current Gain	h _{FE}	V _{CE} =10V, I _C =5mA	40	100	180	
Current Gain Bandwidth Product	f _T	V _{CE} =10V, I _C =5mA	1.5	2		GHz
Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0, f=1MHz		1	1.3	pF
Conversion Gain	G _{CB}	V _{CB} =10V, I _E =5mA f _{RF} =900MHz, f _{OSC} =935MHz	10	12.5		dB

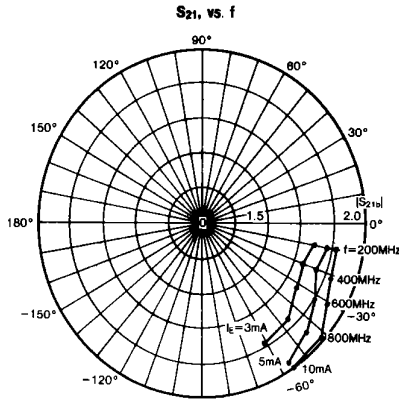
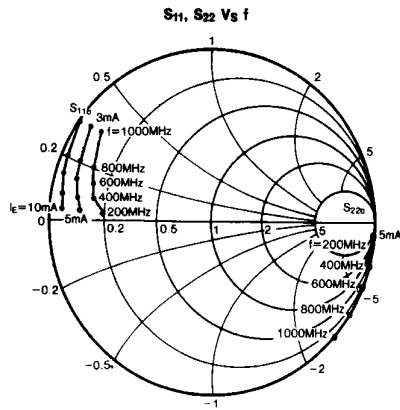
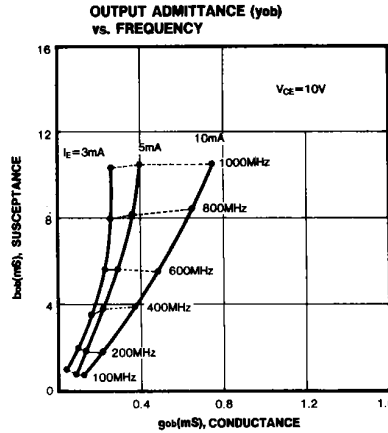
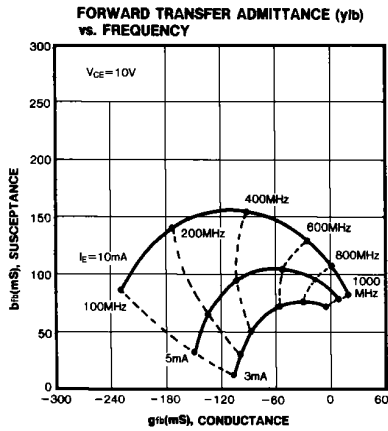
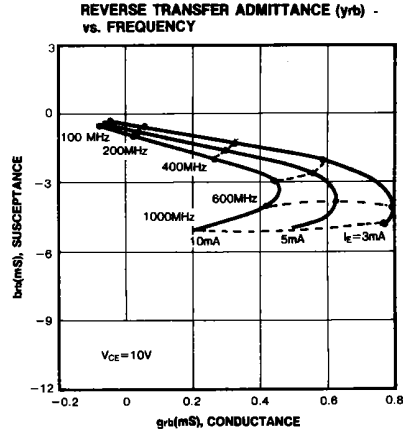
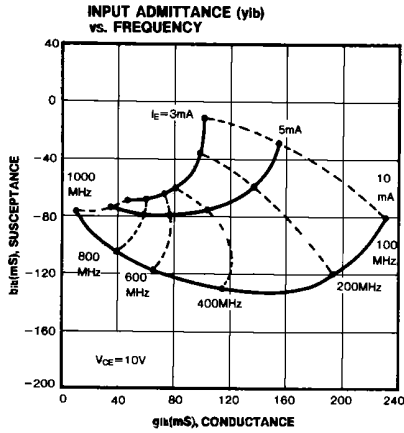
h_{FE} CLASSIFICATION

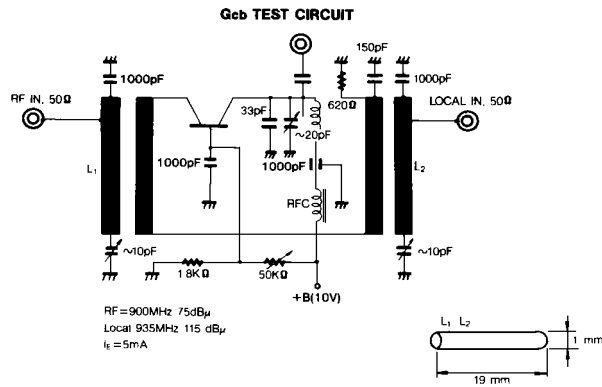
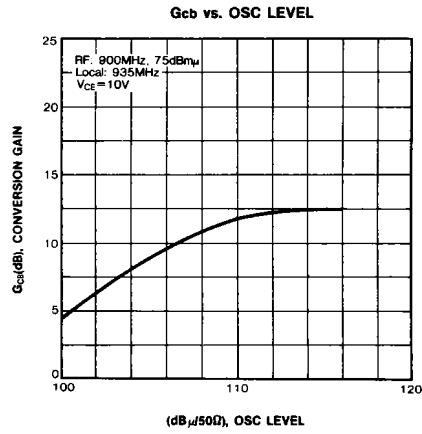
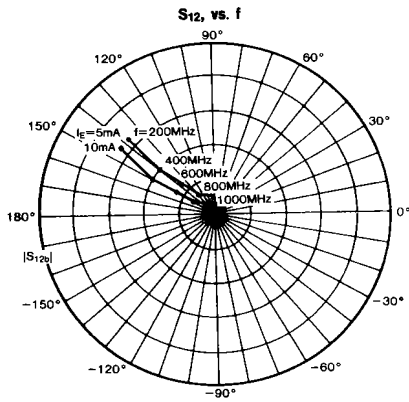
Classification	R	O	Y
h _{FE}	40-80	60-120	90-180

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