

2SC2805

SILICON NPN EPITAXIAL PLANAR TYPE

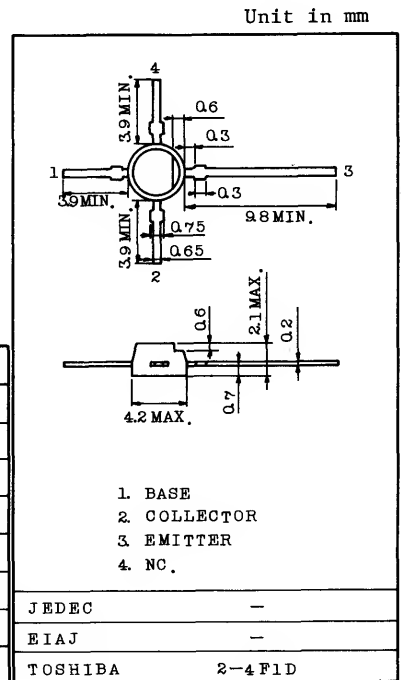
TV TUNER, UHF OSCILLATOR APPLICATIONS. (COMMON BASE)
 TV TUNER, UHF CONVERTER APPLICATIONS. (COMMON BASE)

FEATURES:

- High Transition Frequency : $f_T=1500\text{MHz}$ (Typ.)
- Excellent Linearity

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CE0}	15	V
Emitter-Base Voltage	V_{EB0}	3	V
Base Current	I_B	25	mA
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 125	$^\circ\text{C}$

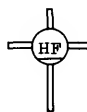


Weight : 0.08g

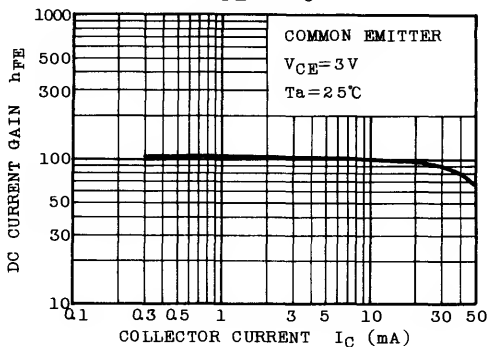
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=15\text{V}, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=3\text{V}, I_C=0$	-	-	1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	15	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=3\text{V}, I_C=8\text{mA}$	60	150	320	
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_C=8\text{mA}$	1100	1500	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	0.9	1.3	pF
Collector-Base Time Constant	$C_c.rbb'$	$V_{CB}=10\text{V}, I_C=8\text{mA}, f=30\text{MHz}$	-	7	12	ps

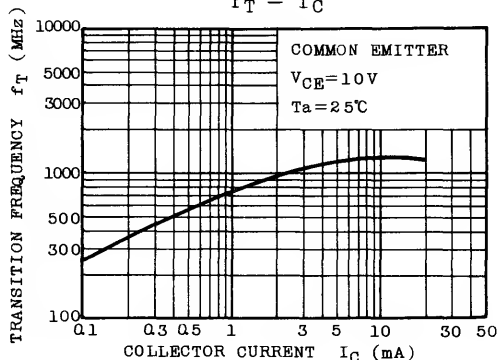
Marking



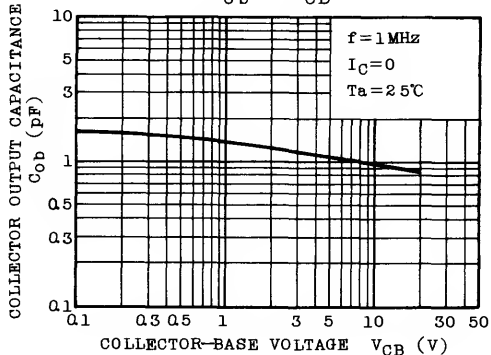
$h_{FE} - I_C$



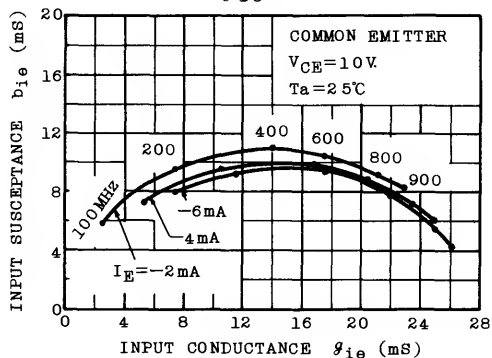
$f_T - I_C$



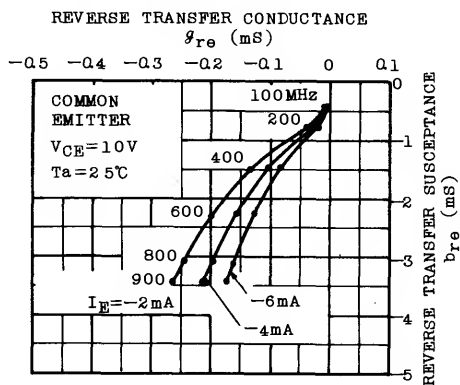
$C_{ob} - V_{CB}$



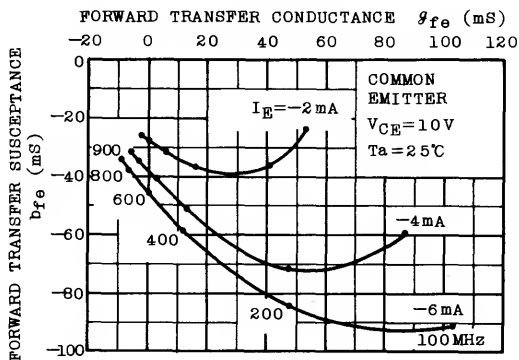
$y_{ie} - f$



$y_{re} - f$



$y_{fe} - f$



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