

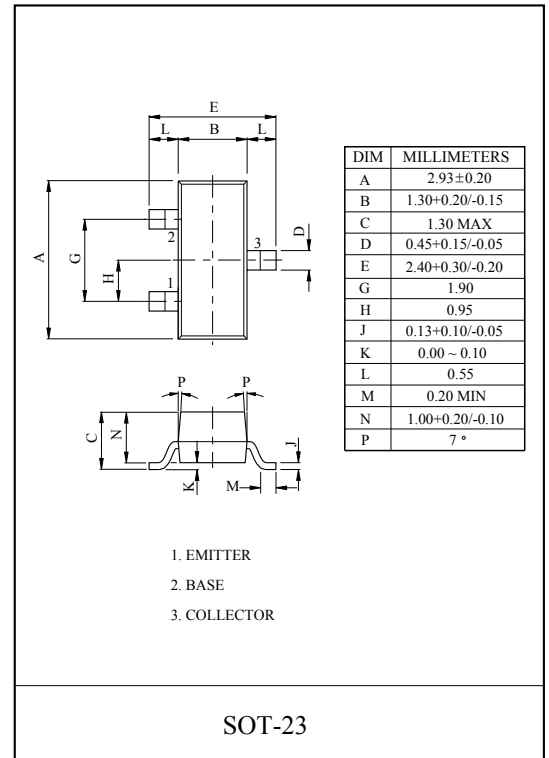
HIGH FREQUENCY APPLICATION.  
VHF BAND AMPLIFIER APPLICATION.

### FEATURES

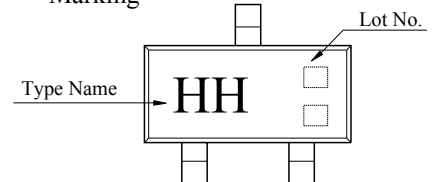
- Good Linearity of  $f_T$ .

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	50	mA
Base Current	$I_B$	25	mA
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



### Marking

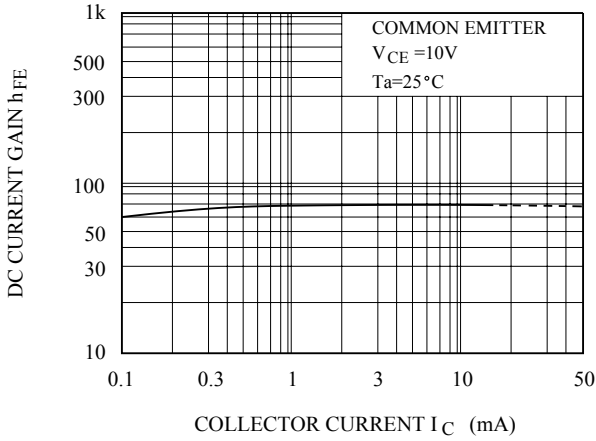


### ELECTRICAL CHARACTERISTICS (Ta=25°C)

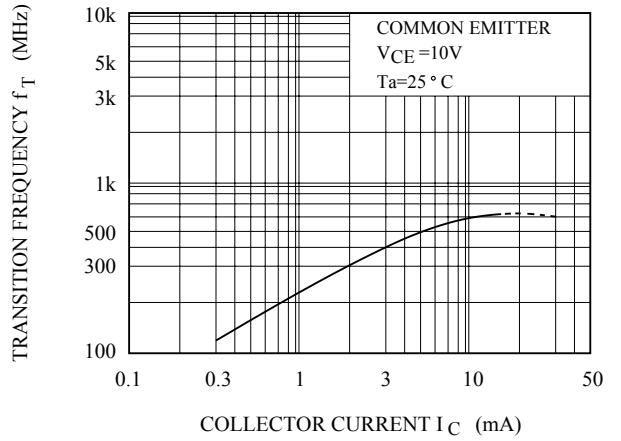
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=30V, I_E=0$	-	-	0.1	$\mu A$
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=3V, I_C=0$	-	-	0.1	$\mu A$
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10mA$	25	-	-	V
DC Current Gain		$h_{FE}$	$V_{CE}=10V, I_C=10mA$	20	70	200	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	$I_C=15mA, I_B=1.5mA$	-	-	0.2	V
	Base-Emitter	$V_{BE(sat)}$		-	-	1.5	
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	1.1	1.6	pF
Collector-Base Time Constant		$C_C \cdot r_{bb}'$	$V_{CB}=10V, I_E=1mA, f=30MHz$	-	-	25	pS
Transition Frequency		$f_T$	$V_{CE}=10V, I_C=10mA$	250	600	-	MHz

# KTC3881S

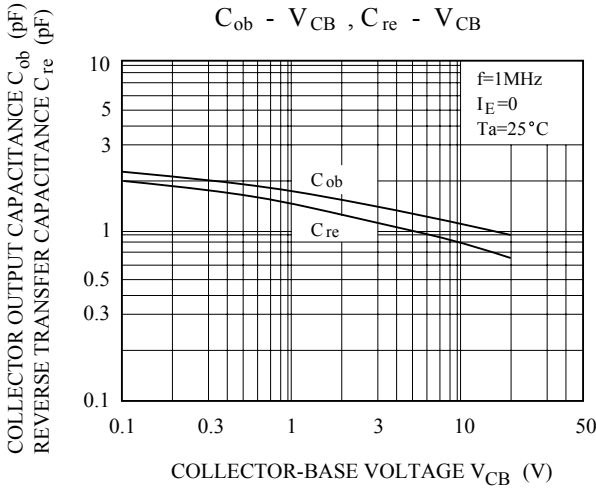
$h_{FE} - I_C$



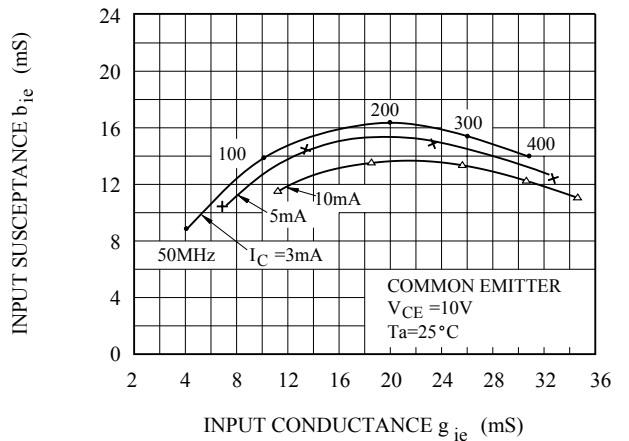
$f_T - I_C$



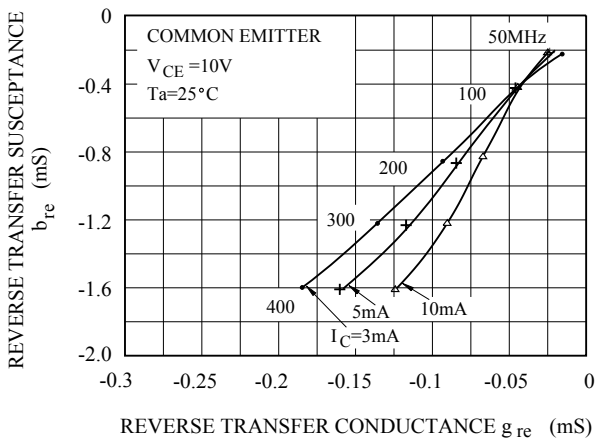
$C_{ob} - V_{CB}, C_{re} - V_{CB}$



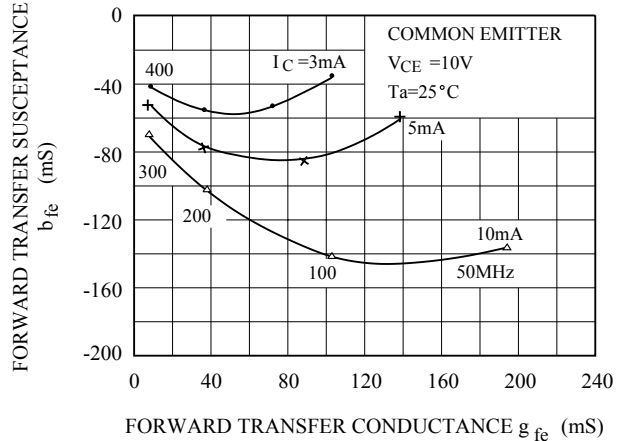
$y_{ie} - f$



$y_{re} - f$



$y_{fe} - f$



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