SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

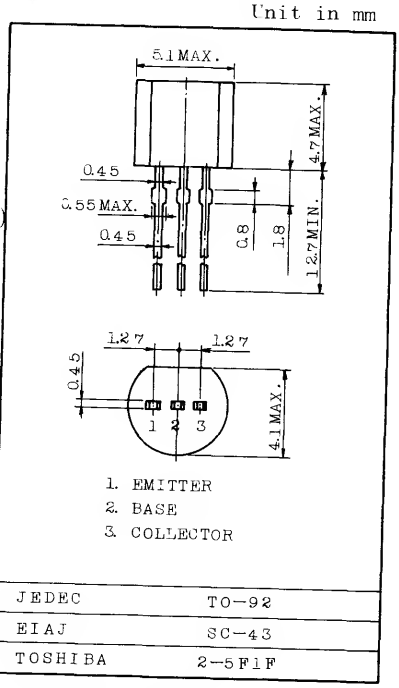
S1423

GENERAL-PURPOSE AMPLIFIER AND LOW NOISE AMPLIFIER APPLICATIONS.

FEATURES:

- Excellent h_{FE} Linearity : $h_{FE}(0.1mA)$ $h_{FE}(2mA)$ =0.95(Typ.)
- Designed for Complementary Use with S1420(h_{FE}=70 700)
- Small Collector Output Capacitance: C_{ob}=4.5pF(Max.)

Unit in mm



JEDEC	TO-92
EIAJ	SC-43
TOSHIBA	2-5F1F

Weight : 0.21g

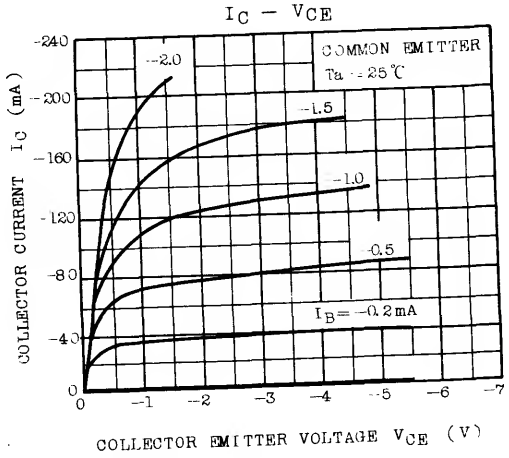
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-7	V
Collector Current	I_C	-200	mA
Base Current	I_B	-200	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

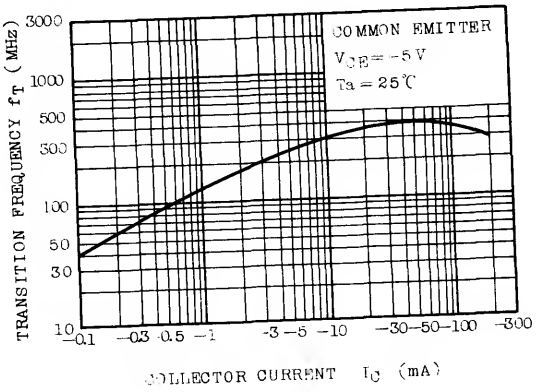
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cutoff Current	I_{CBO}	V_{CB}=-30V, I_E=0	-	-	-50	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-6V, I_C=0	-	-	-100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-40	-	-	V
DC Current Gain	h_{FE}	V_{CE}=-5V, I_C=-2mA	70	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-50mA, I_B=-10mA	-	-	-0.22	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-5V, I_C=-2mA	-	-0.65	-	V
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	-	4.5	pF
Transition Frequency	f_T	V_{CE}=-5V, I_C=-10mA	150	300	-	MHz

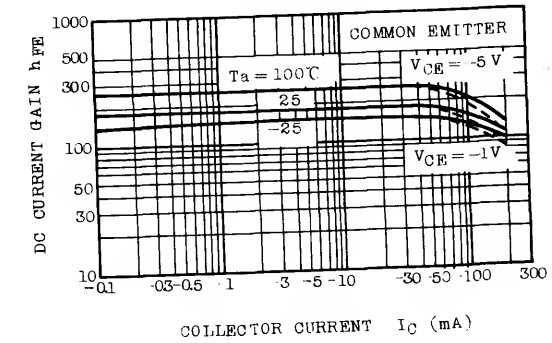
$I_C - V_{CE}$



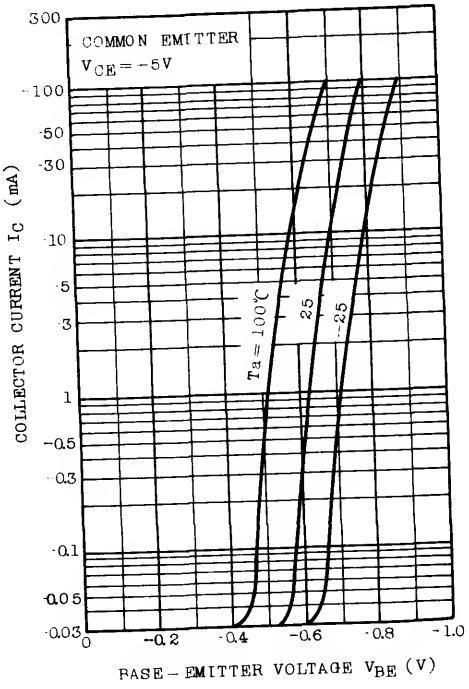
$f_T - I_C$



$h_{FE} - I_C$



$I_C - V_{BE}$



$V_{CE(sat)} - I_C$