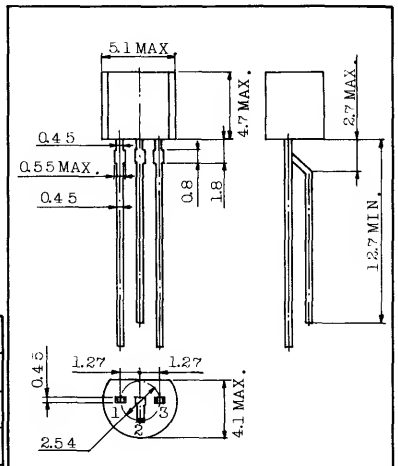
AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.
DRIVER STAGE AMPLIFIER APPLICATIONS.

FEATURES:
. High Voltage and High Current
: V_{CEO}=50V(Min.), I_C=150mA(Max.)
. Excellent h_{FE} Linearity
: $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)$=0.95(Typ.)
. Low Noise : NF=1dB(Typ.) at f=1kHz
. Complementary to TED1602.

Unit in mm



1. COLLECTOR
2. BASE
3. EMITTER

JEDEC	TO-92
EIAJ	SC-43
TOSHIBA	2-5F2G

Weight : 0.21g

MAXIMUM RATINGS (Ta=25°C)

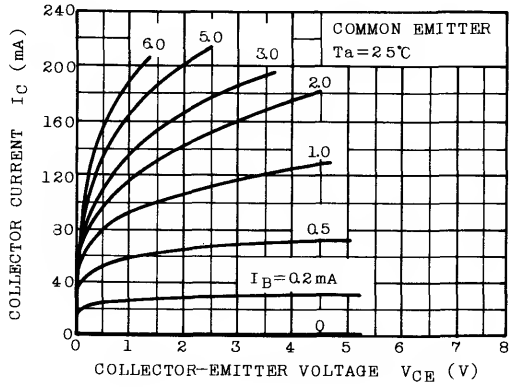
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-65 ~ 125	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

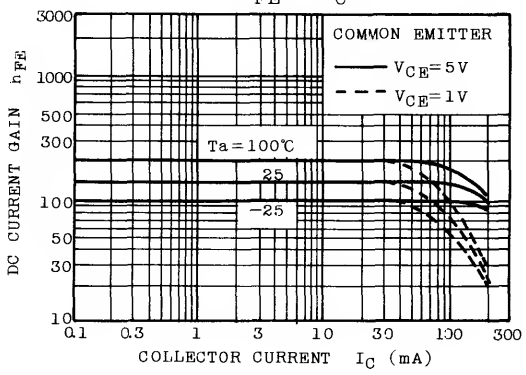
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}(1)$	V_{CB}=60V, I_E=0	-	-	0.1	μA
	$I_{CBO}(2)$	V_{CB}=60V, I_E=0, Ta=125°C	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	0.1	μA
DC Current Gain	h_{FE} (Note)	V_{CE}=5V, I_C=2mA	110	-	810	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}(1)$	I_C=10mA, I_B=1mA	-	0.04	0.25	V
	$V_{CE(sat)}(2)$	I_C=100mA, I_B=5mA	-	0.2	-	
Base-Emitter Voltage	V_{BE}	V_{CE}=5V, I_C=1mA	0.53	0.60	0.68	V
Transition Frequency	f_T	V_{CE}=10V, I_E=-1mA	-	175	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	1.9	-	pF
Noise Figure	NF(1)	V_{CE}=5V, I_E=-0.2mA, R_g=2kΩ, f=1kHz	-	1.0	10	dB
	NF(2)	V_{CE}=5V, I_E=-1mA, R_g=800Ω, f=1MHz	-	2.0	-	

Note : h_{FE} Classification A:110 ~ 165, B:150 ~ 225, C:202 ~ 318, D:290 ~ 450, E:414 ~ 810

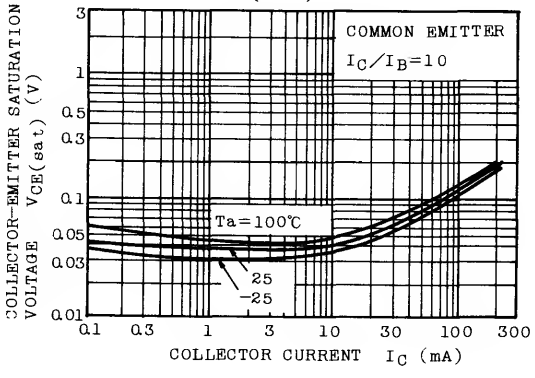
$I_C - V_{CE}$



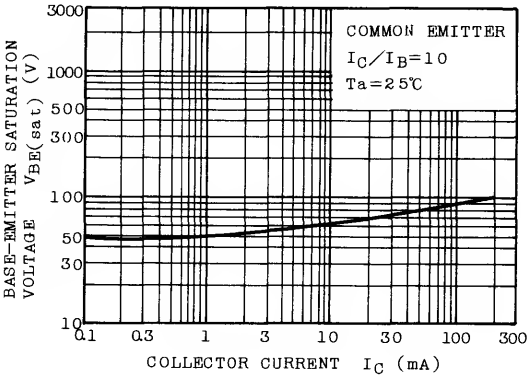
$h_{FE} - I_C$



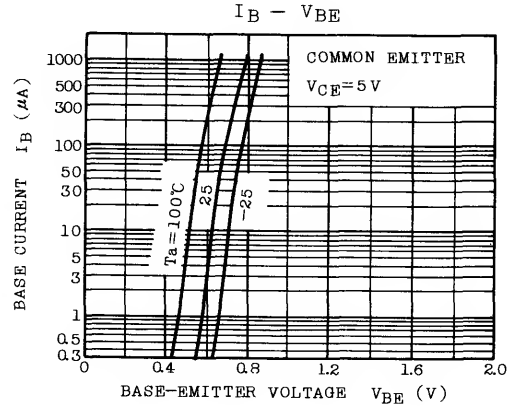
$V_{CE(sat)} - I_C$



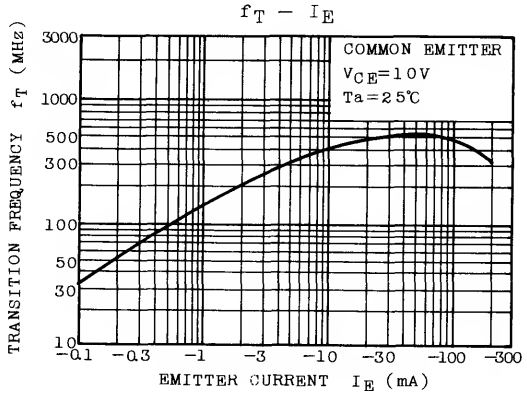
$V_{BE(sat)} - I_C$



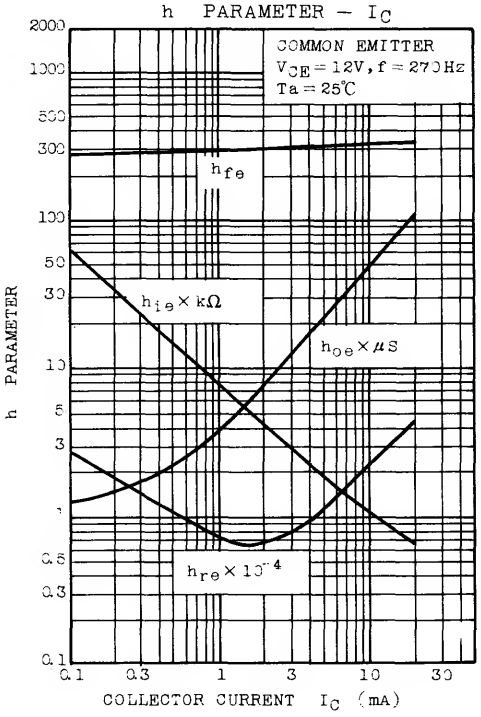
$I_B - V_{BE}$



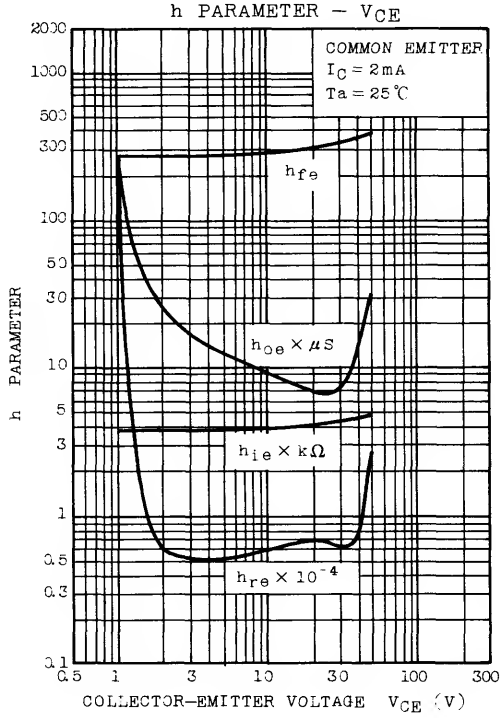
$f_T - I_E$



h PARAMETER — I_C



h PARAMETER — V_{CE}



P_C — Ta