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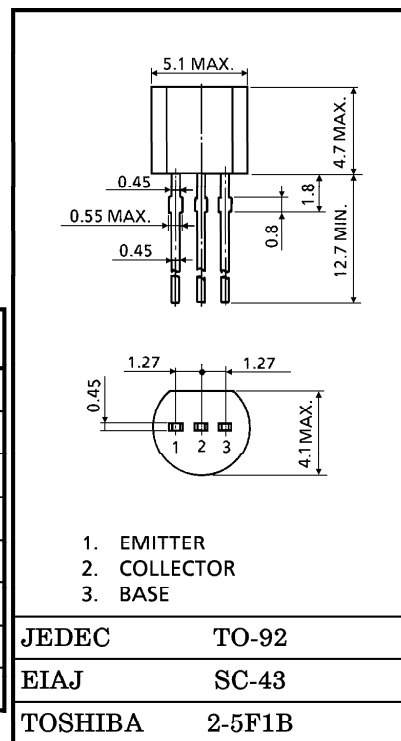
LOW NOISE AUDIO AMPLIFIER APPLICATIONS

- High Breakdown Voltage : $V_{CEO}=50V$
- Excellent h_{FE} Linearity
 : $h_{FE}(I_C=0.1mA) / h_{FE}(I_C=2mA) = 0.95$ (Typ.)
- Low Noise : $NF(1)=0.5dB$ (Typ.) ($f=100Hz$)
 : $NF(2)=0.2dB$ (Typ.) ($f=1kHz$)

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

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	30	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~125	$^\circ C$

Unit in mm



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=60V, I_E=0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	—	—	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=6V, I_C=2mA$	200	—	700	
Collector-Emitter Breakdown Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$	—	—	0.3	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=6V, I_C=2mA$	—	0.65	—	V
Transition Frequency	f_T	$V_{CE}=6V, I_C=1mA$	—	150	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	—	2.0	—	pF
Noise Figure	NF (1)	$V_{CE}=6V, I_C=0.1mA, f=1kHz, R_G=10k\Omega$	—	0.5	6	V
Noise Figure	NF (2)	$V_{CE}=6V, I_C=0.1mA, f=1kHz, R_G=10k\Omega$	—	0.2	3	V

Note : h_{FE} Classification GR : 200~400, BL : 350~600

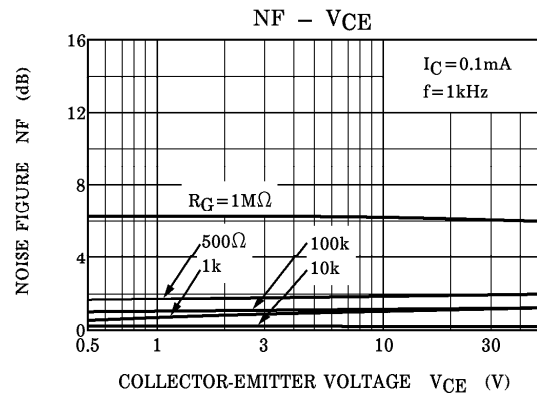
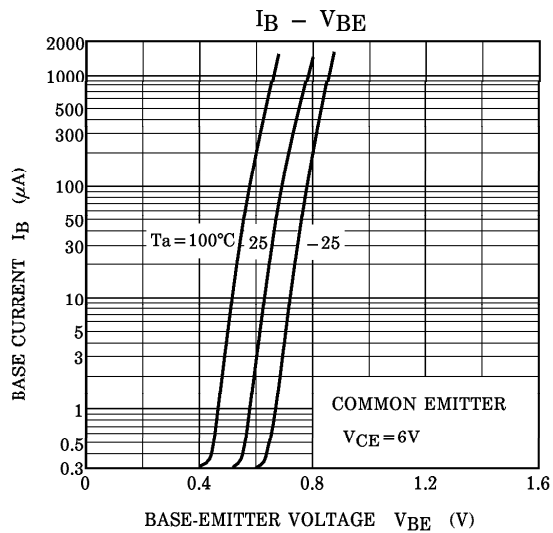
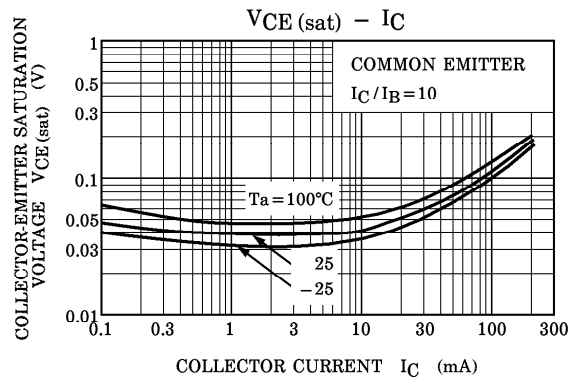
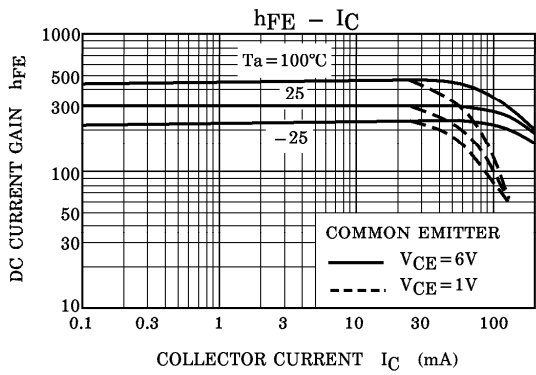
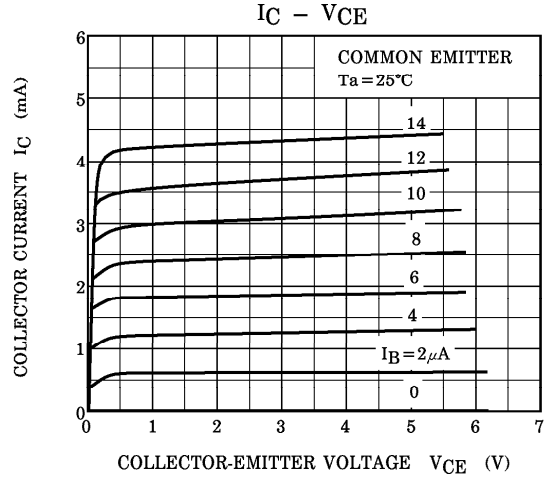
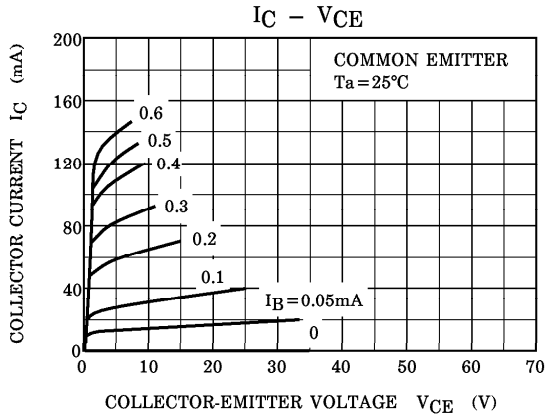
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