

(2SC732TM)

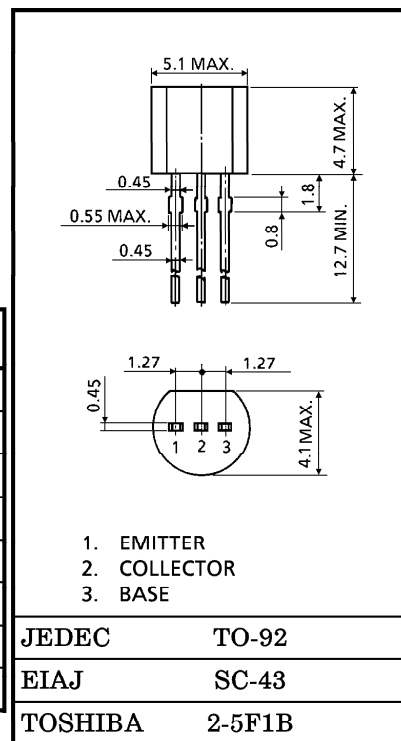
LOW NOISE AUDIO AMPLIFIER APPLICATIONS

- High Breakdown Voltage :  $V_{CE0}=50V$
- 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



Weight : 0.21g

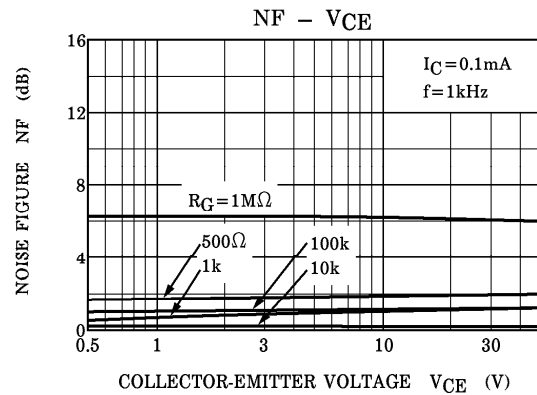
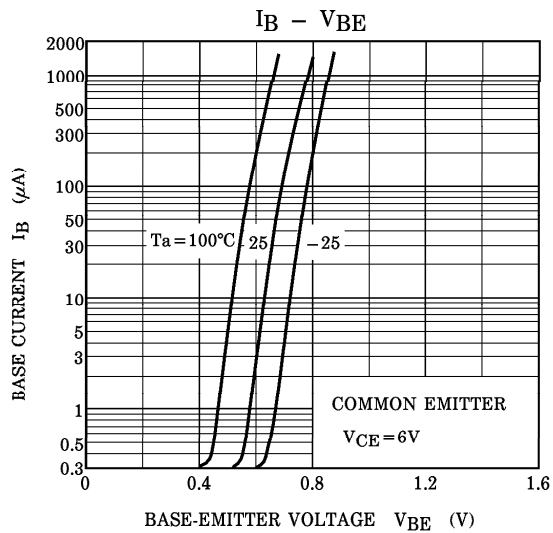
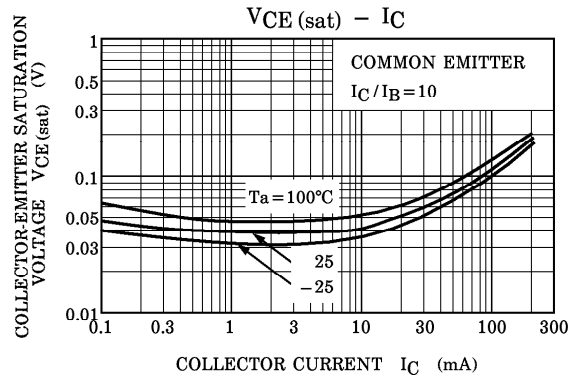
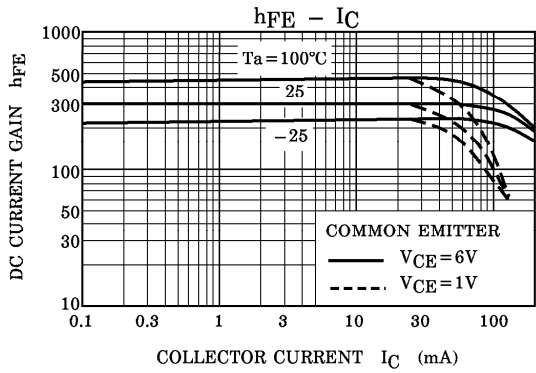
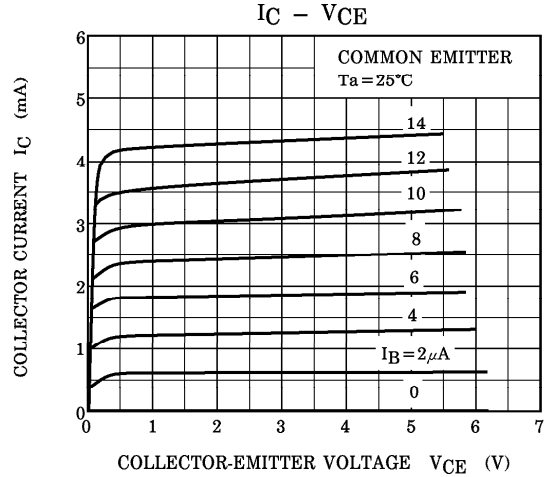
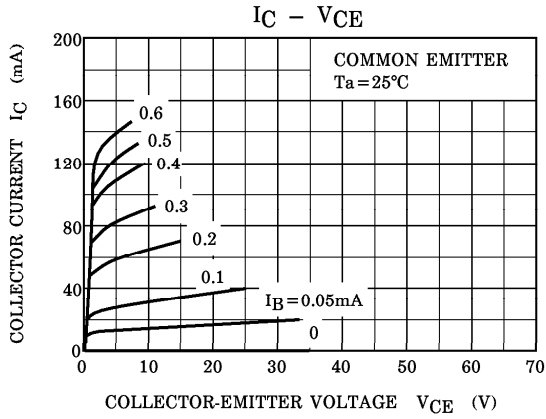
ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 60V, I_E = 0$	—	—	0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$	—	—	0.1	$\mu A$
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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