

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL (PCT PROCESS)

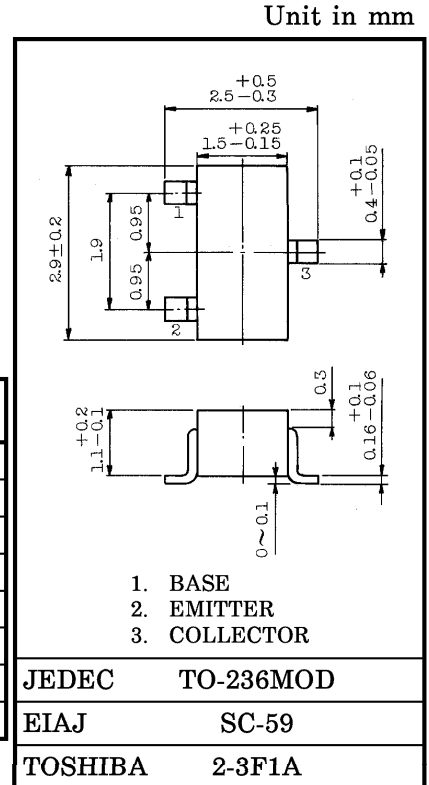
2SC2859

AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS.
 DRIVER STAGE AMPLIFIER APPLICATIONS.
 SWITCHING APPLICATIONS.

- Excellent h_{FE} Linearity
 : $h_{FE}(2) = 25(\text{Min.}) (V_{CE} = 6V, I_C = 400\text{mA})$
- Complementary to 2SA1182.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	35	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~125	$^\circ\text{C}$



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

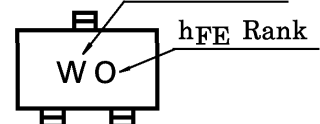
Weight : 0.012g

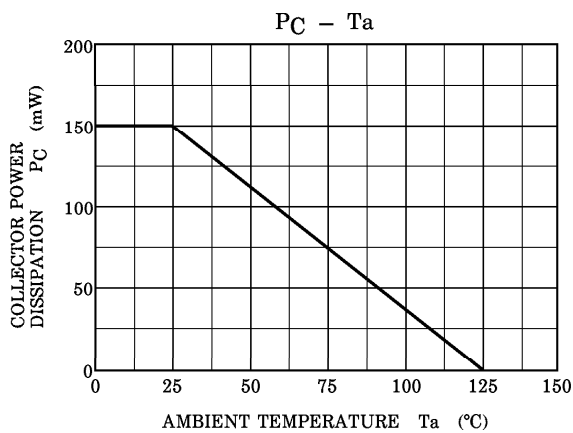
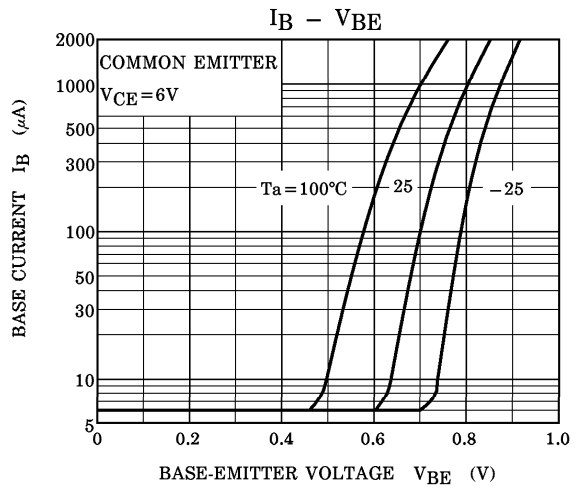
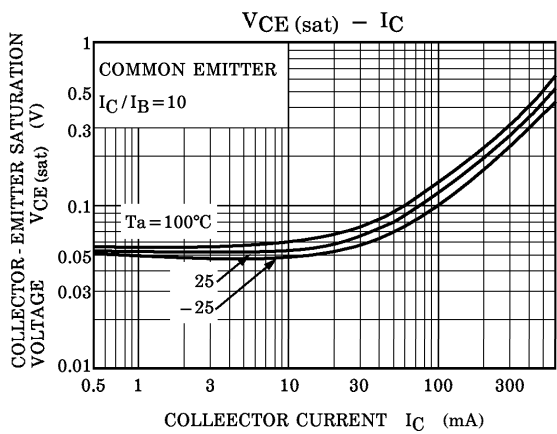
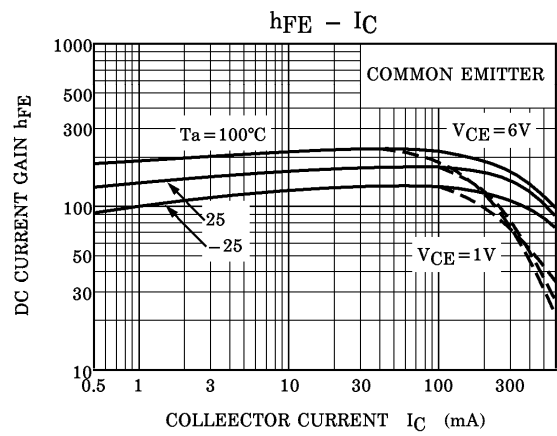
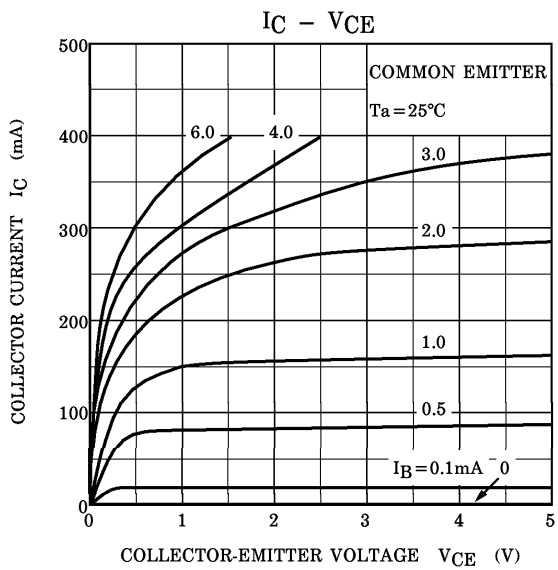
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 35V, I_E = 0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	—	—	0.1	μA
DC Current Gain (Note)	$h_{FE}(1)$	$V_{CE} = 1V, I_C = 100\text{mA}$	70	—	400	
	$h_{FE}(2)$	$V_{CE} = 6V, I_C = 400\text{mA}$	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = 100\text{mA}, I_B = 10\text{mA}$	—	0.1	0.25	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 1V, I_C = 100\text{mA}$	—	0.8	1.0	V
Transition Frequency	f_T	$V_{CE} = 6V, I_C = 20\text{mA}$	—	300	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 6V, I_E = 0, f = 1\text{MHz}$	—	7	—	pF

Note: $h_{FE}(1)$ Classification O (O): 70~140, Y (Y): 120~240, GR (G) : 200~400
 $h_{FE}(2)$ Classification O : 25Min., Y : 40Min. GR : 70Min.
 () Marking Symbol

MARKING

Type Name





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000707EAA

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