

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC3423

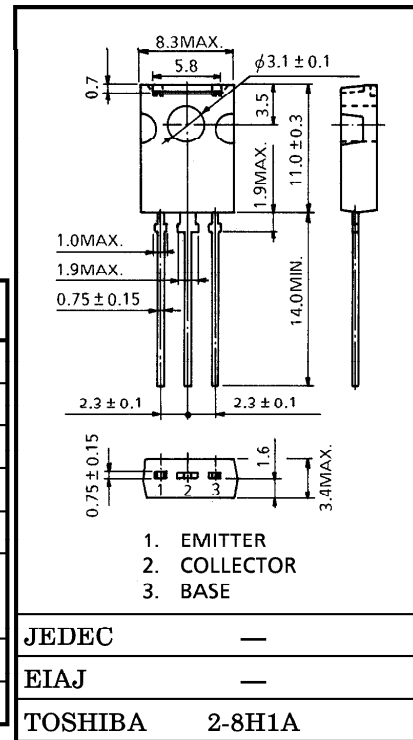
AUDIO FREQUENCY AMPLIFIER APPLICATIONS.

Unit in mm

- Complementary to 2SA1360
- Small Collector Output Capacitance : $C_{ob}=1.8\text{pF}$ (Typ.)
- High Transition Frequency : $f_T=200\text{MHz}$ (Typ.)

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	150	V
Collector-Emitter Voltage		V_{CEO}	150	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	50	mA
Base Current		I_B	5	mA
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	1.2	W
	$T_c = 25^\circ\text{C}$		5	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$



Weight : 0.82g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=150\text{V}, I_E=0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	—	—	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=5\text{V}, I_C=10\text{mA}$	80	—	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$	—	—	1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}, I_C=10\text{mA}$	—	—	0.8	V
Transition Frequency	f_T	$V_{CE}=5\text{V}, I_C=10\text{mA}$	—	200	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	—	1.8	—	pF

Note : h_{FE} Classification O : 80~160, Y : 120~240

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