

TOSHIBA

2SC3422

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC3422

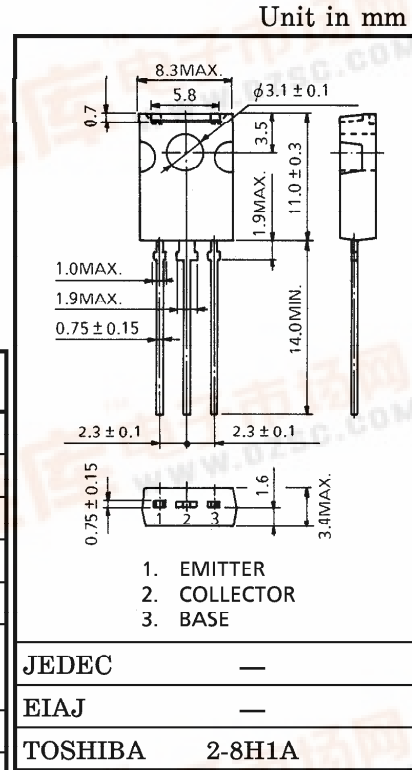
AUDIO FREQUENCY POWER AMPLIFIER.

LOW SPEED SWITCHING.

- Suitable for Output Stage of 5 Watts Car Radio and Car Stereo.
- Good Linearity of h_{FE} .
- Complementary to 2SA1359.

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CB0}	40	V
Collector-Emitter Voltage		V_{CEO}	40	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	3	A
Base Current		I_B	1	A
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	1.5	W
	$T_c = 25^\circ\text{C}$		10	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 40\text{V}, I_E = 0$	—	—	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	—	—	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C = 10\text{mA}, I_B = 0$	40	—	—	V
DC Current Gain	$h_{FE} (1)$ (Note)	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	80	—	240	—
	$h_{FE} (2)$	$V_{CE} = 2\text{V}, I_C = 2.5\text{A}$	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE (sat)}$	$I_C = 2\text{A}, I_B = 0.2\text{A}$	—	—	0.8	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	—	—	1.0	V
Transition Frequency	f_T	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	—	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	—	35	—	pF

Note : $h_{FE} (1)$ Classification O : 80~160, Y : 120~240

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