

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

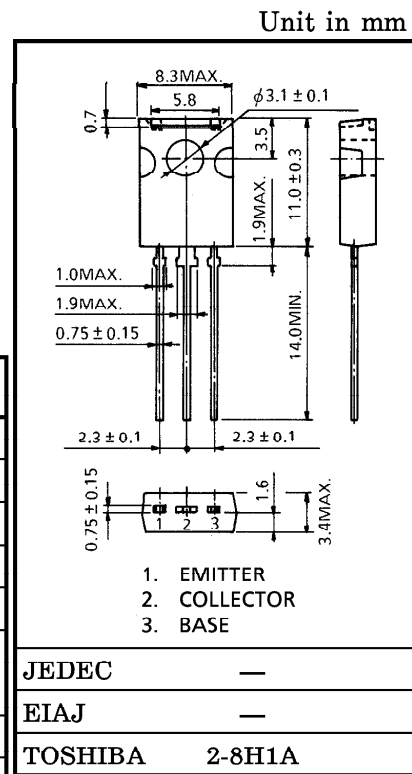
# 2SC3422

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		$V_{EB0}$	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	$^\circ\text{C}$



Weight : 0.82g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 40\text{V}, I_E = 0$	—	—	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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