

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL PLANAR TYPE

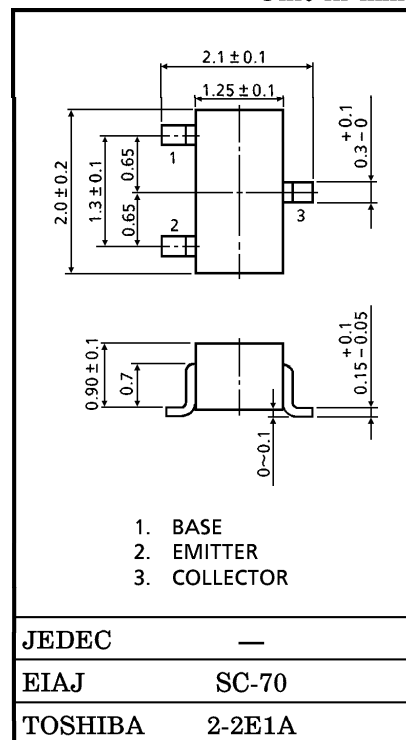
# 2SC4251

TV TUNER, VHF OSCILLATOR APPLICATIONS

Unit in mm

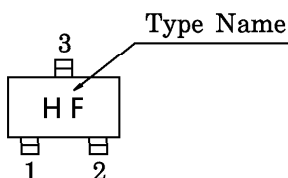
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	30	V
Collector-Emitter Voltage	V <sub>CEO</sub>	15	V
Emitter-Base Voltage	V <sub>EBO</sub>	3	V
Collector Current	I <sub>C</sub>	50	mA
Base Current	I <sub>B</sub>	25	mA
Collector Power Dissipation	P <sub>C</sub>	100	mW
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	-55~125	°C



Weight : 0.006g

Marking



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> = 15V, I <sub>E</sub> = 0	—	—	0.1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 3V, I <sub>C</sub> = 0	—	—	1.0	μA
Collector-Emitter Breakdown Voltage	V (BR) CEO	I <sub>C</sub> = 1mA, I <sub>B</sub> = 0	15	—	—	V
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 3V, I <sub>C</sub> = 8mA	40	100	200	—
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 8mA	650	1100	—	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz	—	0.9	1.3	pF
Collector-Base Time Constant	C <sub>c</sub> . rbb'	V <sub>CB</sub> = 10V, I <sub>C</sub> = 8mA, f = 30MHz	—	7	12	ps

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