

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL PLANAR TYPE

# 2SC4248

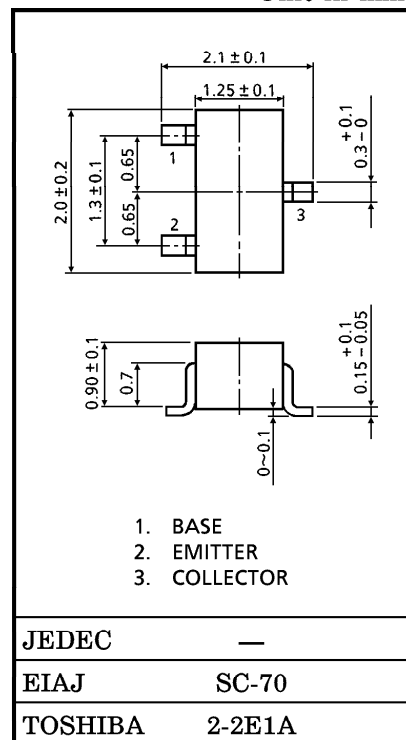
TV TUNER, UHF OSCILLATOR APPLICATIONS (COMMON COLLECTOR)

Unit in mm

- Transition Frequency is High and Dependent on Current Excellently.

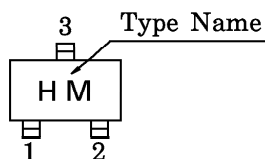
**MAXIMUM RATINGS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	20	V
Collector-Emitter Voltage	V <sub>CEO</sub>	12	V
Emitter-Base Voltage	V <sub>EBO</sub>	3	V
Base Current	I <sub>B</sub>	15	mA
Collector Current	I <sub>C</sub>	30	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> = 10V, I <sub>E</sub> = 0	—	—	0.1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 2V, I <sub>C</sub> = 0	—	—	1.0	μA
Collector Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1mA, I <sub>B</sub> = 0	12	—	—	V
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 5mA	70	—	130	—
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 10mA, f = 1000MHz	3	4	—	GHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz	—	1.05	1.35	pF
Collector-Base Time Constant	C <sub>c-rbb'</sub>	V <sub>CB</sub> = 10V, I <sub>C</sub> = 5mA, f = 30MHz	—	4.5	9.0	ps

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