TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

# 2SC4253

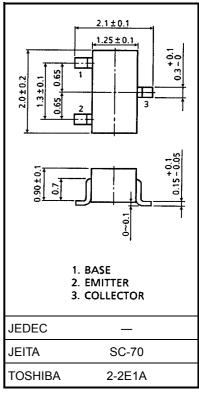
## TV Final Picture IF Amplifier Applications

Unit: mm

• Good linearity of fT

#### Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	30	V
Collector-emitter voltage	V <sub>CEO</sub>	25	V
Emitter-base voltage	V <sub>EBO</sub>	4	٧
Collector current	I <sub>C</sub>	50	mA
Base current	Ι <sub>Β</sub>	25	mA
Collector power dissipation	PC	100	mW
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C

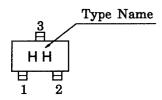


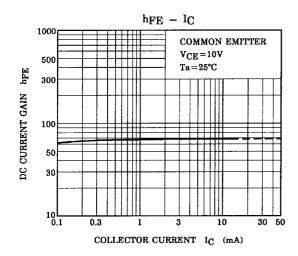
Weight: 0.006 g (typ.)

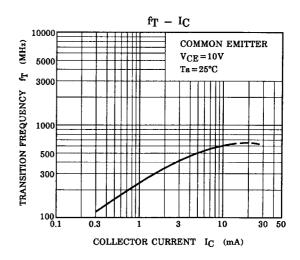
## **Electrical Characteristics (Ta = 25°C)**

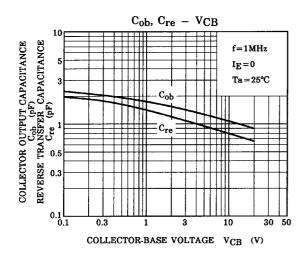
Characteristics		Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current		I <sub>CBO</sub>	$V_{CB} = 30 \text{ V}, I_{E} = 0$	_	_	0.1	μΑ
Emitter cut-off current		I <sub>EBO</sub>	V <sub>EB</sub> = 3 V, I <sub>C</sub> = 0	_	_	0.1	μА
Collector-emitter b	reakdown voltage	V (BR) CEO I <sub>C</sub> = 1 mA, I <sub>B</sub> = 0		25	_	_	٧
DC current gain		h <sub>FE</sub>	V <sub>CE</sub> = 10 V, I <sub>C</sub> = 10 mA	20	70	200	
Saturation voltage	Collector-emitter	V <sub>CE (sat)</sub>	I <sub>C</sub> = 15 mA, I <sub>B</sub> = 1.5 mA	_	_	0.2	V
	Base-emitter	V <sub>BE (sat)</sub>		_	_	1.5	V
Collector output capacitance		C <sub>ob</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1 MHz	_	1.1	1.6	pF
Collector-base time constant		C <sub>c</sub> .rbb'	$V_{CB} = 10 \text{ V}, I_{C} = 1 \text{ mA}, f = 30 \text{ MHz}$	_	_	25	ps
Transition frequency		f <sub>T</sub>	V <sub>CE</sub> = 10 V, I <sub>C</sub> = 10 mA	250	600	_	MHz

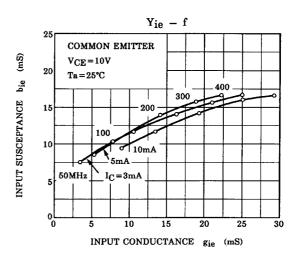
## Marking

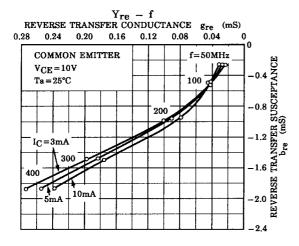


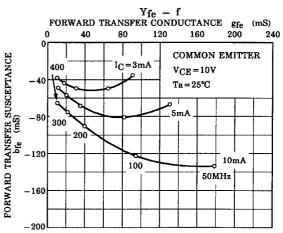


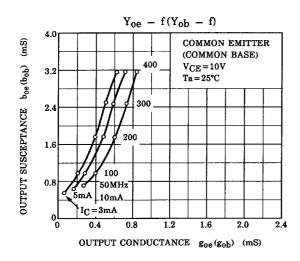


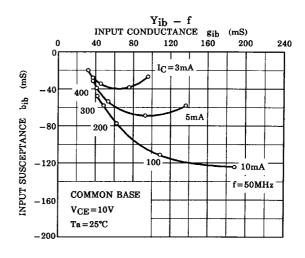


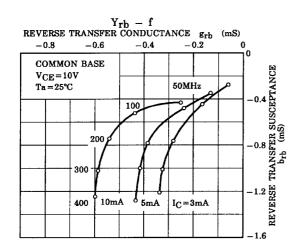


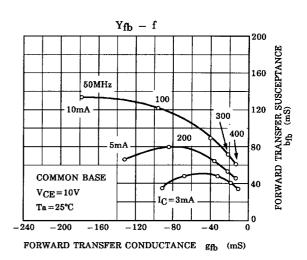


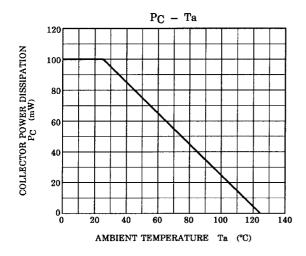












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