TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

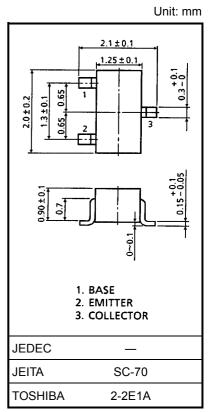
2SC4248

TV Tuner, UHF Oscillator Applications (common collector)

• Transition frequency is high and dependent on current excellently.

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	20	V
Collector-emitter voltage	V _{CEO}	12	V
Emitter-base voltage	V _{EBO}	3	V
Base current	ΙΒ	15	mA
Collector current	IC	30	mA
Collector power dissipation	PC	100	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C

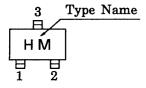


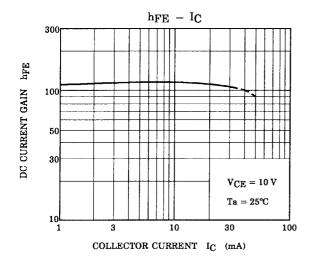
Weight: 0.006 g (typ.)

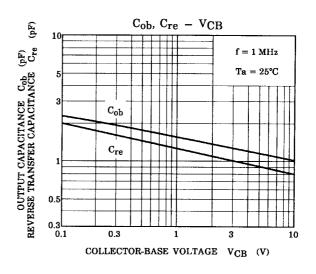
Electrical Characteristics (Ta = 25°C)

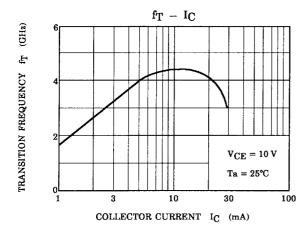
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	$V_{CB} = 10 \text{ V}, I_{E} = 0$		_	0.1	μА
Emitter cut-off current	I _{EBO}	$V_{EB} = 2 \text{ V}, I_{C} = 0$		_	1.0	μΑ
Collector-emitter breakdown voltage	V _(BR) CEO	$I_C = 1 \text{ mA}, I_B = 0$	12	_	_	V
DC current gain	h _{FE}	$V_{CE} = 10 \text{ V}, I_C = 5 \text{ mA}$	70	_	130	
Transition frequency	f _T	$V_{CE} = 10 \text{ V}, I_{C} = 10 \text{ mA}$	3	4	_	GHz
Output capacitance	C _{ob}	$V_{CB} = 10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$	_	1.05	1.35	pF
Collector-base time constant	C _c .rbb'	$V_{CB} = 10 \text{ V}, I_{C} = 5 \text{ mA}, f = 30 \text{ MHz}$	_	4.5	9.0	ps

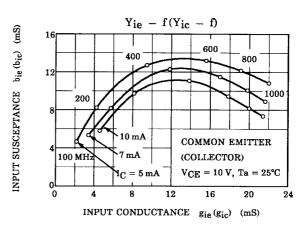
Marking

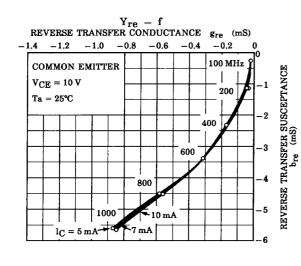


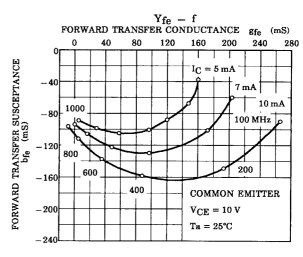




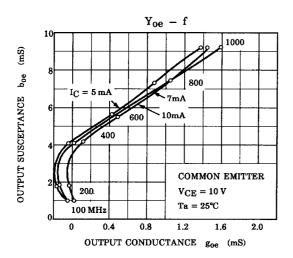


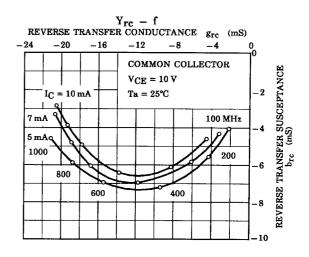


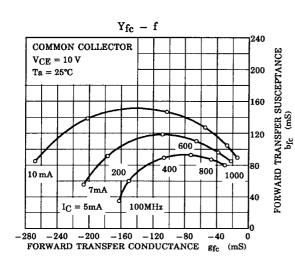


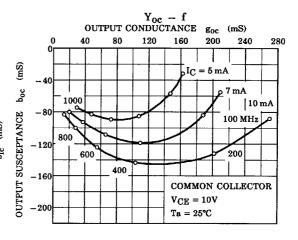


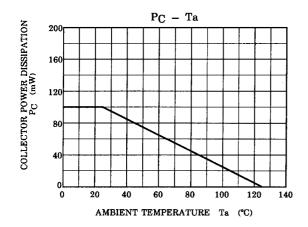
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