TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

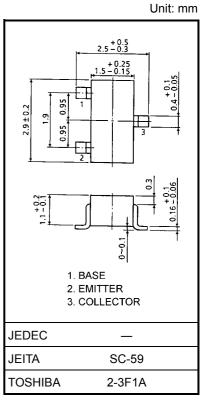
2SC3125

TV Final Picture IF Amplifier Applications

• Good linearity of fT

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V _{CEO}	25	V
Emitter-base voltage	V _{EBO}	4	٧
Collector current	I _C	50	mA
Base current	Ι _Β	25	mA
Collector power dissipation	PC	150	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C

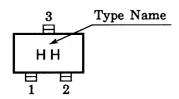


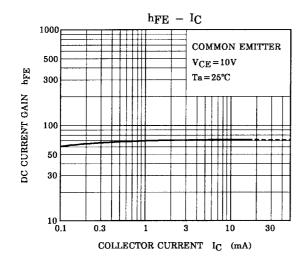
Weight: 0.012 g (typ.)

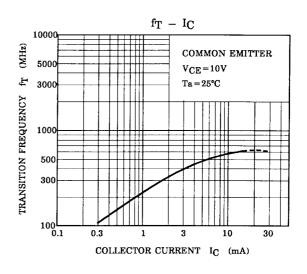
Electrical Characteristics (Ta = 25°C)

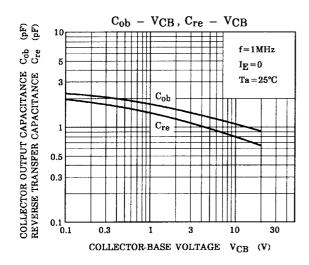
Charac	teristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current I _{CBC}		I _{CBO}	$V_{CB} = 30 \text{ V}, I_E = 0$	_	_	0.1	μΑ
Emitter cut-off curre	ent	I _{EBO}	$V_{EB} = 3 \text{ V}, I_{C} = 0$		_	0.1	μА
Collector-emitter br	eakdown voltage	V (BR) CEO	$I_C = 10 \text{ mA}, I_B = 0$	25	_		V
DC current gain		h _{FE}	$V_{CE} = 10 \text{ V}, I_{C} = 10 \text{ mA}$	20	70	200	
Saturation voltage	Collector-emitter	V _{CE (sat)}	I _C = 15 mA, I _B = 1.5 mA	_	_	0.2	V
	Base-emitter	V _{BE (sat)}		_	_	1.5	
Collector output ca	pacitance	C _{ob}	$V_{CB} = 10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$	_	1.1	1.6	pF
Collector-base time constant		C _c .rbb'	$V_{CB} = 10 \text{ V}, I_{C} = 1 \text{ mA}, f = 30 \text{ MHz}$	_	_	25	ps
Transition frequency		f _T	$V_{CE} = 10 \text{ V}, I_{C} = 10 \text{ mA}$	250	600	_	MHz

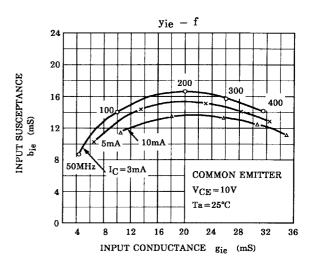
Marking

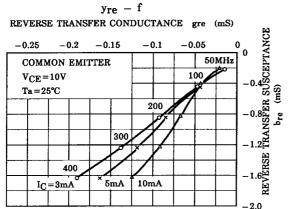


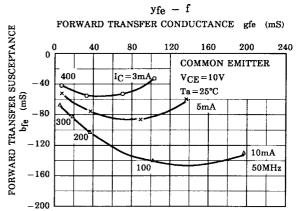




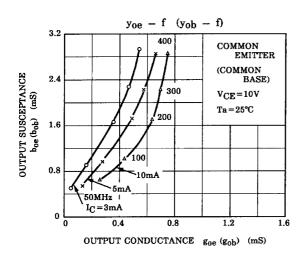


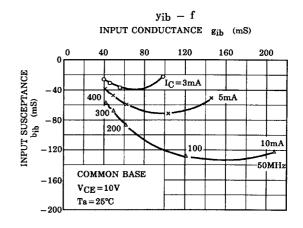


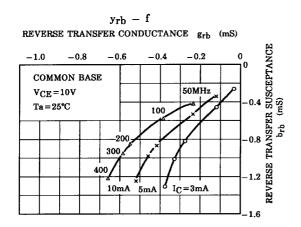


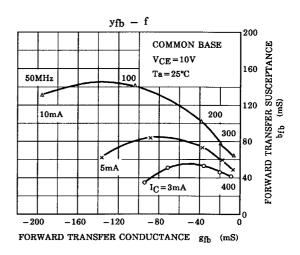


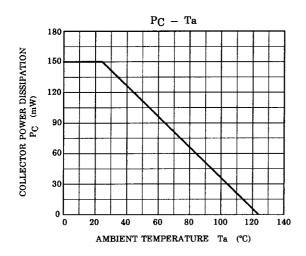
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