TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC3326

For Muting and Switching Applications

• High emitter-base voltage: V_{EBO} = 25 V (min)

• High reverse hFE: Reverse hFE = 150 (typ.) (VCE = -2 V, IC = -4 mA)

• Low on resistance: $R_{ON} = 1 \Omega$ (typ.) ($I_B = 5 \text{ mA}$)

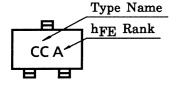
• High DC current gain: $h_{FE} = 200 \sim 1200$

• Small package

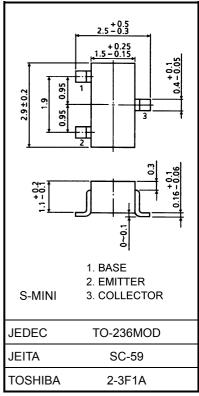
Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V _{EBO}	25	V
Collector current	Ic	300	mA
Base current	ΙΒ	60	mA
Collector power dissipation	P _C	150	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C

Marking



Unit: mm



Weight: 0.012 g (typ.)

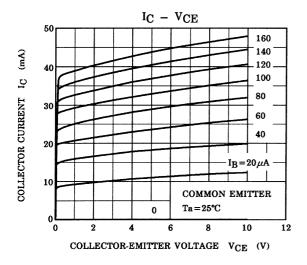


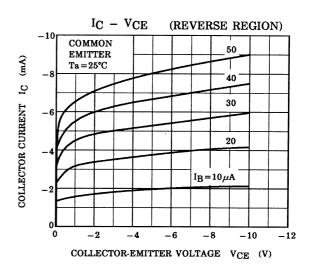
Electrical Characteristics (Ta = 25°C)

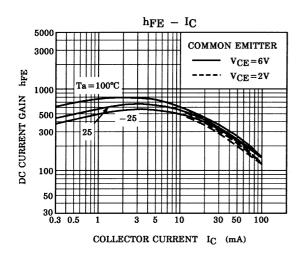
Chara	acteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off of	current	I _{CBO}	$V_{CB} = 50 \text{ V}, I_{E} = 0$		_	0.1	μА
Emitter cut-off cu	rrent	I _{EBO}	V _{EB} = 25 V, I _C = 0	_	_	0.1	μΑ
DC current gain		h _{FE} (Note)	V _{CE} = 2 V, I _C = 4 mA	200	_	1200	
Collector-emitter	saturation voltage	V _{CE (sat)}	$I_C = 30 \text{ mA}, I_B = 3 \text{ mA}$	_	0.042	0.1	V
Base-emitter volta	age	V _{BE}	V _{CE} = 2 V, I _C = 4 mA	_	0.61	_	V
Transition freque	ncy	f _T	V _{CE} = 6 V, I _C = 4 mA	_	30	_	MHz
Collector output capacitance		C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	4.8	7	pF
Switching time Storage	Turn-on time	t _{on}	INPUT OUTPUT 10V 1 1 1 1 1 1 1 1 1 1	_	160	_	
	Storage time	t _{stg}		_	500	_	ns
	Fall time	t _f	$=-3V$ $=12V$ Duty cycle $\leq 2\%$		130	_	

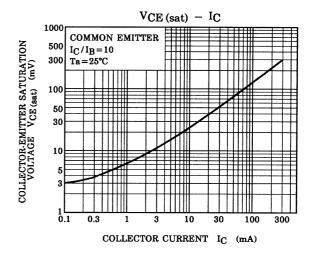
Note: hFE classification A: 200~700, B: 350~1200

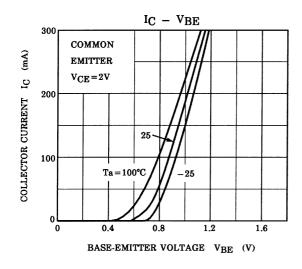
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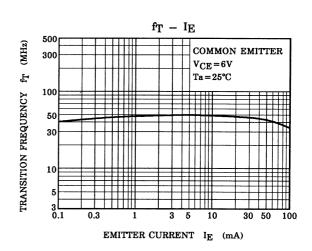


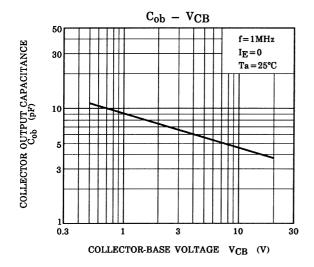


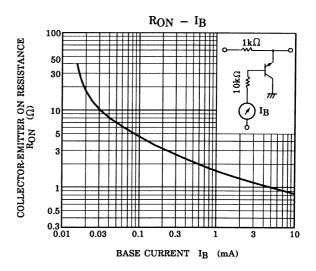


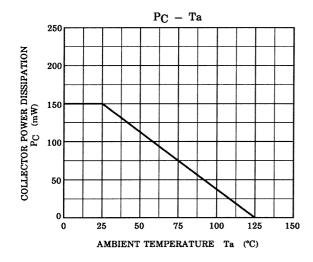












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