Unit: mm

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC3326

For Muting and Switching Applications

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

• High reverse hFE: Reverse hFE = 150 (typ.) ($V_{CE} = -2 \text{ V}$, $I_{C} = -4 \text{ mA}$)

• Low on resistance: $RON = 1 \Omega$ (typ.) (IB = 5 mA)

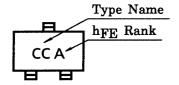
• High DC current gain: $h_{FE} = 200 \sim 1200$

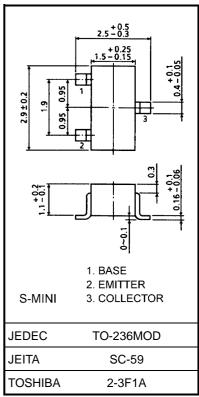
• Small package

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	Ι _Β	60	mA
Collector power dissipation	P _C	150	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C

Marking





Weight: 0.012 g (typ.)

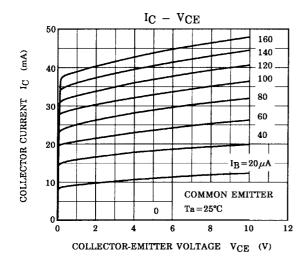


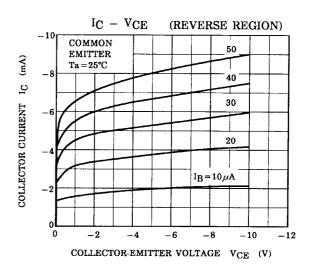
Electrical Characteristics (Ta = 25°C)

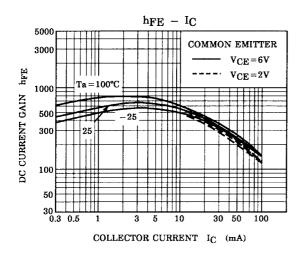
Chara	cteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off c	urrent	I _{CBO}	$V_{CB} = 50 \text{ V}, I_{E} = 0$	_	_	0.1	μΑ
Emitter cut-off cur	rent	I _{EBO}	V _{EB} = 25 V, I _C = 0		_	0.1	μΑ
DC current gain		h _{FE} (Note)	V _{CE} = 2 V, I _C = 4 mA	200	_	1200	
Collector-emitter s	saturation voltage	V _{CE} (sat)	$I_C = 30 \text{ mA}, I_B = 3 \text{ mA}$	_	0.042	0.1	V
Base-emitter volta	ige	V _{BE}	$V_{CE} = 2 \text{ V}, I_{C} = 4 \text{ mA}$	_	0.61	_	V
Transition frequen	ісу	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 Stor	Turn-on time	t _{on}	$\begin{array}{c c} & & & \text{OUTPUT} \\ & & & & \\ 10V \\ \hline & 1 \\ \mu \text{s} & & \\ \hline & & V_{BB} \\ \hline & & V_{CC} \\ \hline & & & = -3V \\ \hline & & & = 12V \\ \end{array}$	_	160	_	
	Storage time	t _{stg}		_	500	_	ns
	Fall time	t _f			130		

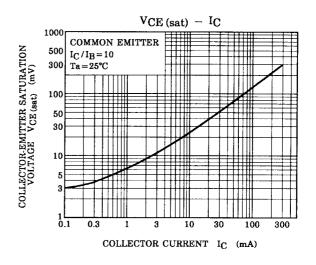
Note: hFE classification A: 200~700, B: 350~1200

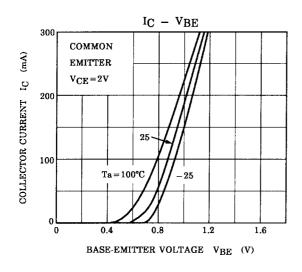
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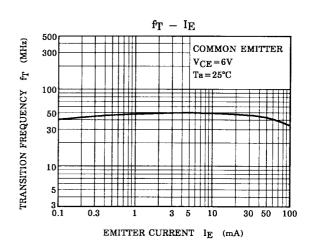




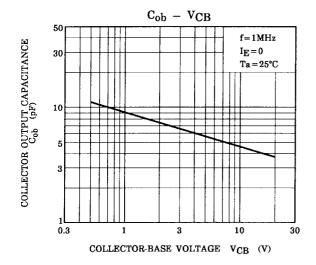


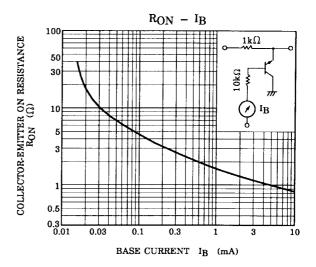


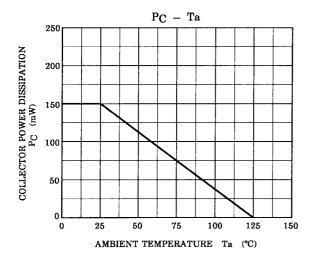




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